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ORF d'après Cole et al. (Nature 393:537-544) et contenant Rv3576
                                        31/11
tas got tot con and top ton coo can gos gos and gto god and can oth god god oth
OCH als eys ard thr trp eys ard gln gly gly the val gly lys gln led als als led
                                        91/31
ger gra org gre ggt gra tgr ata etc gra god gga tgr acc aac gtg atc gac ggg acc
als als led val gly als cys met led als als gly cys the san val val asp gly the
                                        331/51
got gtg got got gat aan tot gga see etg cat hag gat ong ata ong gtt toe gog ett
ala val ala ala asp lys ser gly pro leu his gln asp pro ile pro val ser ala leu
181/61
                                        211/71
gaa ggg otg ott ote gae tig age cag ate aat gee geg etg ggt geg aca teg atg aag
dlu gly leu leu leu asp leu ser gln lie asn alz alz leu gly ala thr ser met lys
241/83
                                        271/91
qtq tgg the ear qcc and qca atg tgg gar tgg agr ang agr gtg gor gar ang ant tgr
val trp phe asm ala lys ala met trp asp trp sor lys ser val ala asp lys asm cys
301/101
                                        331/111
org got ato gad ggt com gos dag gas asg gtd tet got ggt aco ggg tog aco got and
leu ala ile asp gly pro als gin glu lys val tyr als gly thr gly trp thr als met
3817323
                                        391/131
cgo ggo caa cgg ctg gat gao ago ato gat gao too aag aaa ogo gao cac tac goo att
ard gly glo ard law asp asp ser ile asp asp sor lys lys ard asp his tyr ala ile
                                        451/151
cas gog gir gir ggc tic cog acc gos tat gat gor gag gag the tac age too tog gig
gin ala val val gly phe pro the ala his asp ala glu glu phe tyr ser ser ser vel
481/161
                                        511/171
cas ago tog ago ago too tog aac ogo ogg tit gto gas gto soo ooo ggs cag gao gao
gin ser try ser ser cys ser ash and and phe val glo val the pro-gly gin asp asp
                                        571/191
goe goe tyg act gig got gad git gir aar gad aar ggd aig did agn agd tog dag git
ala ala trp thr val ala asp val vai ash asp ash gly met lew ser ser ser glo val
601/201
                                        631/211
cay gas ggo ggo gao gga tgg ace tgo cag ogt geo etg act gog ego aac aac gto act
gin giv gly gly asp gly trp thr cys gin arg als led thr als arg asn asn val thr
                                        693/233
ato gao att gio ang tgo goo tat ago caa ong gao ttg gog gog att ggo ath got aan
ils asp ils val thr cys als tyr ser gin pro asp loo val ala ile gly ile als asn
721/241
cas atc gcg gcc sag gtt gct aag cag tag
gin ile ala ala lys val ala lys gin AMB
```

SEQ ID N° 20F

FIGURE 20F

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1/1									31/11								
erc cre	GTC	gcc	gag	CAA	CTG	acc	GGT	ccc	GAT GGA	AAG	TGT	TOA	CGA	TCG	Congr	TTC	Tec
val leu	val	ala	ala	gin	1.00	als	gly	pro	asp gly	à ya	cys	862	arg	388	arg	कतंत्र	cys
61/21									91/31								
cac maa	TAG	TGG	CGA	TGG	ŢĢŢ	\mathcal{ZMO}	CAG	GAT	TGC GGG	TOG	AGG	CTG	CGA	TGG	CCA	GCA	CCA
arg trp	ams	cxp	बरव	trp	cys	AM8	gin	888	cys gly	ser	arg	leu	arg	tro	pro	$a.1.\infty$	200
121/41									151/51				•	•			~
GCG GCC	TGC	GGC	TGG	TCG	CCG	\mathbb{CGC}	GCG	ccc	AAA TGA	TAC	CCG	CGA	TCA	CGA	AA?	ACA	TGT
ala ala	$a\lambda a$	ar_{λ}	trp	860	pro	azg	ala	pro	lys OFA	tyr	220	arg	ser	a r g	222	1.33.2	CYS
181/61									211/71								••
cee cec	TGG	ACG	TCS	CCG	TGC	TGG	CCA	GCT	CGA CCG	GAC	ACG	ATG	TGG	AGG	GGG	ccc	AGA
arg arg	2.23	thr	2 & E	$\delta x \phi$	బర్గిక	2.233	$\phi x \phi$	\$1.8	ard pro	3.50	CHE	2000	tro	ærg	gly	arg	8.00
241/81									271/91								
AAA ACT	TCA	CCG	acc	QCA	AGT	ACG	AGO	TEC	AGA CGC	GAC	TGG	CCG	ACA	CCG	ACC	TCA	TCG
lys thr	33 83 X	$\mathfrak{p} x \mathfrak{p}$	$\mathfrak{p}_{\mathfrak{p}_{\mathcal{Q}}}$	B.L.B.	882	thx	300	\bigcirc ys	arg arg	asp	txp	pxc	thr	220	the	ser	ser
301/101									331/111					7.			
CAG ACG	TOC	GGT	CGG	gag	TGA	ACA	CGC	TGC	TCA ACC	GOG	GTC.	AGG	CGC	TEC	TGG	ATA	AGA
gln thr	căs	gây	$\otimes \mathbb{X} \mathcal{G}$	glu	OPA	thr	arg	27.2	ser thr	ala	val	arg	3.03	cys	tro	114	8.20
361/121														-	•		
TGC TGG	CCG	ACA	GCA	TCG	CCT	TOC	GGG	ATC									
cys trp	pro	thr	ala	383	als	#\$s	gly	ile									

SEO ID N° 21A

FIGURE 21A

32/11 THE TEG THE CHE HAS BEE TOO HER OUT HER ATT GAR AST OTT CAN GAT HER GET THE GOO ser trp ser pro arg ash trp pro vel pro met glu ser val his asp arg als ser ale 92/31 get ggt agt ggc gat ggt gtt age agg att geg ggt ega ggc tge gat gge eag eac eac eac ala gly ser gly asp gly val ser arg ile ala gly arg gly cys asp gly gin his glo 152/51 CGG CCT GCG GCT GGT CGC CGC GCG CGC CGA AAT GAT ACC CGC GAT CAC GAA ATA CAT GTC arg pro ala ala gly arg arg ala arg arg ass asp thr arg asp his glu ile his val 212/71 GGC GCT GGA COT CGC CGT GCT GGC CAG CTC GAC CGG ACA CGA TGT GGA GGG GCC GCA GAA gly als gly arg arg arg ala gly glm lew sop arg thr arg cys gly gly gly ala glu 242/81 272/91 AAA CTT CAC CGC CCG CAA GTA CGA GCT GCA GAC GCG ACT GGC CGA CAC CGA CGT CAT CGC iya leu hiz arg pro gin vel arg ela ela asp ala thr gly arg his arg arg his arg 302/101 332/111 AGA COT GOG STO GGG AGT GAA CAC GOT GOT CAA COG COG TOA GGO GOT GOT GGA TAA GAT arg arg als val gly ser glu his ala ala gln arg arg ser gly ala ale gly OCS asp 362/121 SCI SGC CGA CAS CAT SGS CTT SGG GGA TO ala gly arg gin his arg leu ala gly

SEQ ID N° 21B

FIGURE 21B

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33/11 cot got coc coc gca act god cos tot cga tog aga gtg ttc acg atc gcg ctt ctg cos pro gly and and als the gly and ser and trp lys wal pho the ile als led led pro 93/31 CTG GTA GTG GCG ATG GTG TTA GCA GGA TTG CGG GTC GAG GCT GCG ATG GCC AGC AGC leu val val ala mot val leu ala gly leu arg val glu ala ala met ala ser thr ser 123/41 153/51 GGC CTG CGG CTG GTC GCC GCG CGC GCC GAA ATG ATA CCC GCG ATC ACG AAA TAC ATG TCG gly leu arg leu val ala ala arg ala glu mot ile pro ala ile thr lys tyr met ser 183761 213/71 GCG CTG GAC GTC GCC GTG CTG GCC AGC TCG ACC GGA CAC GAT GTG GAG GGG GCG CAG AAA ala leu asp val ala vel leu ala ser ser thr gly his asp val glu gly ala glo lys 243/81 273/91 AAC TYC ACC GCC CGC AAG TAC GAG CTG CAG ACG CGA CTG GCC GAC ACC GAC GTC ATC GCA ash phe the ala arg lys tyr glu leu gin the arg leu ala asp the asp val ile ala 333/111 GAC STG CGG TCG GGA STG AAC ACG CTG CTC AAC GGC GGT CAG GCG CTG CTG GAT AAG ATG asp val arg ser gly val aso the lew lew aso gly gly glo als lew lew asp lys met 363/123 CTG GCC GAC AGC ATC GGC TTG CGG GAT C leu als asp ser ile gly leu arg asp

SEQ ID N° 21C

FIGURE 210

partie de la séquence nucléotidique de seg21A

5. •

31/11 ACS ATC GCG CTT CTG CCG CTG GTA GTG GCG ATG GTG TTA GCA GGA TTG CGG GTC GAG GCT thr ile als lev lev pro lev val val als met vel lev ale gly lev arg val glu ale 91/31 GCG ATG GCC AGC AGC GGC CTG CGG CTG GCG GCC GCC GCC GAA ATG ATA CCC GCG ala met als ser the ser gly less and les val als als and als gly met ils pro als 151/51 ATC ACS AAA TAC ATS TOS GOO OTS GAC STC SCC STS CTS SCC ASC TOS ACC GGA CAC SAT ile the lys tyr met ser als led sap val ale val led ale ser ser the gly his gap 181/61 211/71 GTG GAS GGG GCG CAG AAA AAC TTC ACC GCC CGC AAG TAC GAS CTG CAG ACG CGA CTG GCC val glu gly ala gin lya aso phe the ala arg lya tye glo led glo the arg led ala 271/91 GAC ACC GAC GTC ATC GCA GAC GTG CGG TCG GGA GTG AAC ACG CTG GTC AAC GGC GGT CAG asp the asp valide ala asp val and set gly values the led led ash gly gly gin 301/101 331/111 GOG OTS CTG GAT AAG ATS CTG GOO SAC ASC ATC GGO TTG CGG GAT C ala leu leu asp lys met leu ala asp ser ile gly les erg asp

SEQ ID N° 21A'

FIGURE 21A'

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1/1 31/11 CGA TOG CGC TTC TGC CGC TGG TAG TGG CGA TGG TGT TAG CAG GAT TGC GGG TCG AGG CTG ard ser ard phe cys ard trp AMS trp ard trp cys AMS gin asp cys gly ser ard les 61/21 91/31 CGA TGG CCA GCA GCG GCC TGC GGC TGG TCG CCG CGC GCG CCG AAA TGA TAC CCG CGA ard trp pro ala pro ala ala cya gly trp ser pro ard ala pro lys OPA tyr pro ard 151/51 TOA CGA AAT ACA TOT COO COO TGG ACG TCG CCG TGC TGG CCA GCT CGA CCG GAC ACG ATG ser arg asn the dys arg arg tro the ser pro dys tro pro ala arg pro sap the met 211/71 TOG AGG GGG CGC AGA AAA ACT TCA CCG CCC GCA AGT ACG AGC TGC AGA CGC GAC TGG CCG tup and giy and and lys the ser pro pro ala ser the ser cys and and asp our pro 271/91 ACA CCG ACG TEA TEG CAG ACG TOE GGT CGG GAG TEA ACA EGC TGC TEA ACG GEG GTE AGG thr pro the ser ser gln the eye gly arg glu OPA the arg eye ser the ale val arg 301/101 331/111 CSC TGC TGG ATA AGA TGC TGG CCG ACA GCA TCG GCT TGC GGG ATC ard dys top ile ard dys trp pro the als see als dys gly ile

SEQ ID N° 218'

FIGURE 21B'

1/1 31/11 CAC GAT COC GCT TCT GCC GCT GGT AGT GGC GAT GGT GTT AGC AGG ATT GCG GGT CGA GGC his asp arg ala ser ala ala gly ser gly asp gly val ser arg ile ala gly arg gly 91/31 THE GAT GGC CAS CAS CAS COS COT GUT GUT GOT CGC CGC GCG CGC CGA AAT GAT ACC CGC cys asp gly glo his gln arg pro ala ala gly arg arg ala arg arg asn asp thr arg 121/41 151/51 gat cac gaa ata cat sto sec set sga cet esc est set eas etc sac esc aca ega asp his glu ile his val gly ale gly arg arg arg ale gly gln leo asp arg the arg 211/71 TOT GGA GGG GGC GCA GAA AAA CTT CAC CGC CCG CAA GTA CGA GCT GCA GAC GCG ACT GGC cys gly gly gly ala glu lys let his arg pro gin val arg ala ala asp ala the gly 241/81 271/91 CGA CAC CGA CGT CAT CGC AGA CGT GCG STC GGC AGT GAA CAC GCT GCT CAA CGG CGG TCA arg his arg arg his arg arg arg ale val gly ser glu his ale ale gla arg arg ser 301/101 331/111 SGC GCT GCT GGA TAA GAT GCT GGC CGA CAG CAT CGG CTT GGG GGA 70 gly ale ale gly OCH esp ale gly arg gin his arg les ale gly

SEQ ID N° 21C'

FIGURE 21C'

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séquence Rv3365c prédite par Cole et al. (Nature 393:537~544) et contenant Seg2lA' 1/1 31/11 gry acc and the goe ego see are only gre gog gog got get tot gat att too got val thr met phe als any pro the ile pro val als als als als ser esp ile ser als 61/21 91/31 cog got caa cog god ogo ggo ass oot cag caa ogo sog cog too tog tog cog sgo asc bro sys dru bro sys std dra has bro dru dru std bro bro set trb set bro std seu 121/41 151/51 tog and give aga tog ass gig the seg are gog att one one one gis gig gog and gig trp pro val and trp lys val phe thr ile ala low iew pro lew val val ala met val 181/61 211/71 the goa gos the copy of copag got gog and god and and ago ego one ogg one one god leu ala gly leu arg val glu ala ala mer ala ser thr ser gly leu arg leu val ala 271/91 and ogo don has ath ata one god ath and was tan and the don oth day the don the ala ard ala glu met ile pro ala ile thr lys tyr met ser sie leu asp val ala val 301/101 331/111 ctq que age tog ave ggs car gat gtg gag ggg geg cag aaa aac tte ace gee ege aag leu als ser ser the gly his asp val glu gly als gin lys aso phe the als seg lys 363/123 391/131 tac gag ctg cag acg cgs ctg god gad acc gad gtd atc gos gad gtg dgg tog ggs gtg tyr glu leu gin thr arg leu als asp thr asp val ile als asp val arg ser gly val 421/141 451/151 ase acq ctq ctc ase ego ggt cag geg ctq ctq gat ase gtg ctq geo geo gat ago ato ggo ash the let let ash gly gly gln als let let asp lys vol let als asp ser ile gly 511/171 ting and day and die ace dee fac bed eed etd etd the ace dee can app att dae les and asp and wat the als tyr als pro less less tes the als gin asm wat like asp 571/191 gog tog gtg ogg gtt gac age gag caa ate oga aco cag gtg esg gg: ttg age ogs gee als ser valuer values ser giu gln ile erg thr glo val gin gly leu ser arg als 601/201 631/211 git que que ege ggg cag atg acq aig cag gag ate eig gtg act ege gge gee gae ett val gly als any gly gin met the met gln glu ije len val the ang gly ala amp leu 691/231 gan gag cog cas the age age gog sig git act the god god son tas and the son of ala glu pro gla low ang sen ala met val the low ala gly the glu pro sen the low 721/241 751/251 tto ggg atg ago gog gog etc ggt gom ggg tog cog gae ace mag man etg cag cag can phe gly met ser als als leu gly als gly ser pro asp the lys sen leu gla gla gin 781/281 811/271 and great are ago and gog and and not gan dog got got gos one great as as one gag met val the acq met als ile met ser asp pro als val als leu val ass ass pro glu 841/281 871/291 cty cty car tog ata cag atc acc ego gas att got gag sag gty atc acc gas acc acc led led his ser lie gin ile thr arg asp ile ala glu gin val lie thr asp thr thr 931/311 gag gog gig ang aag bog gig baa ago cag gon and gad ogg ogg gat gon gog att oge glu als wal the lys see wal glm see gin ala the asp arg arg asp ala als ile arg 981/321 991/331 gas goo gtg otg gtg ittg god god ato gog acc gog ato gto gto gtg ttg gtg gtg gcg asp ala val led val led ala ala ile ala thr ala ile val vol val led val val ala

SEQ ID N° 21F

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1021/341
                                        1051/351
ogo acq cig qio qqq cog arg cqq qta ctg cqt qat qqq gcq ctc aaq qtt qct cat acc
ard the lee val gly pro met ard val lee ard asp gly ala lee lys val ala his the
1081/361
                                        1111/371
gat etc gae que que ate gen gen gen etc en que que que que que con ate een que con etq
asp leu asp gly glu ile ala ala val arg ala gly asp glu pro ile pro glu pro leu
                                        1171/391
gog gtg tac ace ace gag gaa ato ggt cag gto gog cat gog gto gac gag ctg cac acc
ala val tyr thr thr glu glu ile gly glo val ala his ala val asp glu leu his thr
1201/401
                                         1231/411
ogg got tig tig old got ggt gad gad acg ogg tig oga old old git act gag atg til
arg ala leu leu leu ala gly glu glu thr arg leu arg leu leu val ase glu met phe
1261/421
                                        1291/431
gag ace aid teg egg egt age egt too etg gie gan eag mag etg teg gie ane gan maa
glu the met ser arg arg ser arg ser leu val asp gln gln leu ser val ile asp gin
1321/441
                                        1351/451
oty yay ogo aac gay gay gat oor goo oga oto gac ago ott the ogg oto gat cae otg
leu glu arg asn glu glu eep pro ala arg leu asp ser leu phe arg leu asp his leu
1381/461
                                         1411/471
gae goe can eta ego ego aso sgo goo sac eta eta gig eta goo gge gog esg att soo
ala ala arg leu arg arg asn ser ala asn leu leu vai leu ala gly ala gin ile thr
1441/481
                                        1471/491
egt gan has egt gag tog gig tog big toa and gig att age get got gig tha gag gig
arg asp his arg glu pro val pro leu ser thr val ile ser ala ala val ser glu val
1501/501
                                        1531/511
gay gan tat ogn ogn gto gan ato gog agg gia ton gan tyt gog gia gto ggn gog gog
glu sep tyr arg arg val asp ile ale arg val pro asp cys ale vel val gly ale ale
1561/521
                                       . 1591/531
got ggt ggo gto alt cat dig oft god gag old atd gad aad gog tig ogd tad beg tom
ala qly qly val ile his leu lou ala qlu leu ile asp aso ala leu aro tyr ser ser
1621/541
                                         1881/881
ced ace acarece dit edd dit dec dec des ate dde ade das dde adt dit etd etd edd
pro the the pro val and val als als als lie gly see glu gly see val led led and
1601/561
                                         1711/571
are tog gat too ggo ong ggo ang are gan goo gan ogg ogg ang goo aan ang ogg ong
ile ser asp ser gly led gly met thr asp ale asp arg arg met ale asn met arg led
                                         1771/591
egy goe gge ggt gag gte ace eeg gat agt goe egg cae atg ggt etg tto gta gte gge
arg ala gly gly glu val the pro sep see als arg his met gly led phe val val gly
1801/601
                                         1831/611
ogg ong got ogg cae oge are oge git gog ong ogt oog git eet git gas eeg
arg low ala gly arg his gly ile arg val gly lew arg gly pro val thr gly glu gin
1861/621
                                         1891/631
ggo ace ggo ace ace geo gag give ime ely ovy ota geo gig etc gag ggg acg geo cea
gly the gly the the ala glu val tyr lan pro len ala val lan glo gly the ala pro
                                       . 1951/651
god cad cod oca and sog ogd gta tit god ato and ood ood tot cot dan ood dog god
als gin pro pro lys pro arg wel phe ale ile lys pro pro cys pro glo pro ala ale
1981/661
                                         2011/671
gor gat seg ang gad gtt don god god and ggg ong ota ona ong gto ang tig oto ong
als asp pro the asp wal pro ala ala ils gly pro led pro pro val the led led pro
```

SEQ ID N° 21D (suite 1)

FIGURE 21D (suite 1)

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2041/681		2071/691
ege ogt acc cog g	gg tox agt ggc ato god	gan gir ong god dag dog atg dag dag ogg
arg arg the pro g	ly ser ser gly ile ala	asp val pro ala gin pro met gin gin arg
2101/701		2131/711
caa cac ass ata s	aa aca coo tgg tgg gag	98% agg ttt cas cag gag ccc aaa caa ccg
arg arg glu leu l	ys thr pro trp trp glu	asp arg phe gin gin giu pro lys gin pro
2161/721		2191/731
cee des ess das e	ca cas eed dea ced ced	occ get ass ect geg tea eeg geg gge ceg
bro sis bro din b	to std bto sis bto bto	pro ala lys pro ala pro pro ala gly pro-
2221/741		2251/751
grugar gar gar g	to ato tao ogg ogg sog	ete too gag ang gtg ggt gae eeg ear gag
- vai asp asp asp v	er fre chr stå stå met	led ser glu met vol gly asp pro his glu
2201/761		2311/771
tord don one was no	on gan ong gan ngg sag sa ass ton ass som som ton	tog gig tgg gas cae ggs tgg tog geg gee
- 2341/781	to sob ran son ren the	ser wal trp sep his gly trp ser als als 2371/781
	Notes the second second second second second second second	
- gas win win alo s	an any non-yel can the	ego acq que tec ggs ctg ccg gtg cgs qua
- 818 918 818 818 81 - 2401/801	of the first car first sec	ang the amp tyr gly less pro well and glu- 2431/811
	to ata man ann ann an	
ore gay are edd c	an naj men njo aja aja	grq cor gag gga occ gat egg gag cat cog val pro glu gly pro asp arg glu his pro
2461/821	wa san ben ket men ara	5481/83:
	ca tro aso oor oos oft	cat coe dan caa ded cod cad cas ded des
olv ala ala iso a	la ser aso clu clu lec	his pro gly sig sla pro arg his sla sla
2521/841	an and man but but but was	2551/851
	on asa asa ata est ecc	too ato ago ago cat the ggo ggo gre ege
ala val ard aso o	ro asp ala val are sis	set lie set set his phe gly gly val atg
2581/861	The second of the second of the second of	2611/871
acc ggg cgg tcc c	at god ogd gag add adt	DAG GGA COU SAL CAG CAA DGA
		gin gly pro ash gin gin OPA

SEQ ID N° 21D (suite)

FIGURE 21D (suite)

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ORF d'après par Cole et al. (Nature 393:537-544) et contennant Rv3365c 31/11 tas gay the gae one the car had one of the end are are are are the decode of occars are OCH gly cys gly are trp his gly are gly his wal the met phe ala are pro the ile 61/2191/31 eeg gie gog geg gee get tet gat att tee gee eeg get eaa oog gee ege gge aaa oot pro val ala ala ala asa ser asp ile ser ala pro ala gin pro ala arq giy iya pro 151/51 gin gin and pro pro ser trp san pro and ash trp pro val and trp lys wal pha the 181/61 211/71 ate geg ett etg cog etg gta gtg geg atg gtg tta gea gga ttg egg gte gag get geg ile ala leu leu pro leu val val ala met val leu ala gly leu arg val glu ala ala 271/91 atq got age act age gge ctq eqq etq gte get geg eqe qee qaa atq ata eec geg atc met als ser thr ser gly lew arg lew val als als arg ala glw met ile pro ala ile 201/101 331/111 acq ass tac atg tog gog otg gat gtt god gtg etg god agd tog acc ggs cat gtg thr lys tyr met ser als leu asp val als val leu als ser ser thr gly his asp val 391/131 gag ggg gog cag asa asc the acc get ege asg tac gag etg cag acg ega obg got gad glu gly ala gin lys asm phe thr ala arg lys tyr glu leu gin thr arg leu ala asp 421/141 481/151 ace gar gtr ato gos gar gtg egg teg ggs gtg sar seg otg etr sar ggo ggt rag grg thr asp valuate als asp valuary sergly valuan the less less asp gly gly gla als 481/161 511/171 cty cty gat any gty cty goo gar myr att gyr tig ogg gat ogg gto mer gor tao gog ieu leu asp lys val leu ala asp ser ile gly leu arg asp arg val thr ala tyr ala 541/181 371/191 ong ong ong the and god cas was gig att eas est too ets one est eas ago eas pro leu leu leu thr ala gin asn val ile asp ala ser val arg val asp ser glu gin 601/201 ate ogs see cag gig cag ggt tig sge ogs gee git gge gee ege ggg cag atg acg sig ile ary the gin val gin gly lew ser ary als vel gly als are gly gin met the met 891/231 cay yay ato ong grg act ogo gge dec çao ont geo gay cog caa etg ego ago gog atg gin giu ile leu val the arg gly ala esp leu ala glu pro gin leu arg ser ala met 721/241 751/251 att acc otg got ggs acc gan occ tog acg etg tto ggg atg ago gog gog etc ggt gon val the lew ala gly the glu pro see the lew phe gly met see ala ala lew gly ala 911/271 ggs tog cog gas ace aag aas sig sag sag saa atg gtg ace agg atg gcg atc atg tee gly set pro sop the lys asm led glo glo glo met val the arg met als ile met see 841/281 871/291 gat oog god git god otg gto abo add ood gag otg otg cad tog ata dag atd add ogd asp pro als val als led val ash ash pro giv led led his sor ile gin ile thr arq

SEQ ID N° 21F

FIGURE 21F

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901/301				aar taa
	and the same of the same	No. See con		931/311
gan der gor gag	way you	4 3 or 4 8 or		acc gag gcg gtg acg asg tog gtg caa age
301/321				thr glu ala val thr lys ser val gln ser 991/331
cad dec see dec	cāā cāā	gat goo	gcg att	ego gae gee gtg etg gtg ttg gee gee atc
gin dia thi asp	arg arg	asp als	ala ile	arg asp ala val leu voi leu sia ala ile
1021/341				1051/351
gog soc gog sto	ate ate	aca sta	grg grg	gog oge acq stg gto ggg cog atg ogg gta
wra cut ers rie	val val	val leu	val val	als are the less valigly pro met are val-
1081/361				1111/371
and edn dan dad	ded err	aag gtt	got cat	acc gat sto gad ggd gag atc gog gcg gto
ren and ash dra	gra fen	ras Asr	ara ura	thr asp les asp gly gls ile ala ala vai
1141/381				1171/391
ede dee dde dwe	dwd cod	800 000	dad cos	ong gog gig had acc acc gag gas and ggt
1201/401	din bro	rre bro	din bro	lon als val tyr thr thr glu glu ile gly
				1231/411
nad don dod out	वेद्यवे वेदद	gac gag	6.62 69.0	acc cgg gen ctg ttg ctg gec ggc gag gas
3261/421	ara Aar	wab ard	res ura	thr arg als led led als gly gld gld
	onathios loss follows		access actions	1291/431
and relief received and	San lan	gec asc	dad ard	ttt gag ace atg teg egg egt age egt tee
1321/441	ran ran	Agr SSS	ជិកស មាគេៗ	phe giu the met ser and and ser and ser
	production conference	from anti-an	*****	1351/451
era dec dec cui	may avy	sag god	43 × ×××	cas ctg gag tyc ast gag gag gat con gee gin law giw ang ann giw giw anp pro ala
1381/461	Americana	SAT AST	ాగాణ జాఖన్న	gan aw gan ang ash gan gan asp pro ala 1411/471
	onthe think	ena eta	mate man	ctd des das odd efd ede odd wwa wde des varriair
ara lau sen ese	San con	was you	ஆகம் மக்க உத்தில்	yen aya aya ard yen ard ard asu set aya erk aya
1441/481	were fires	ಯಾಗಣೆ ಇಮಣ	and the	amu die die dig leu dig dig dan der alb. 1471/49)
	otto and	aren eren		ace cat dat can can ode dad the did of titl
Ass less less val	Jan ala	angar angar angar angar	only nee	thr arg asp his arg glu pro val pro leu
1501/501	armed talent	Ant now	Search more	1531/511
	800 000	area area	ten esse	gto gag gan tat ogo ogo gto gan ato gog
ser thr val ile	ser ala	ala val	ser elo	Age and ash the std std Arr dar see dod
1561/521			and desire	1591/531
agg gta occ gar	tat aca	958 955	000 00a	gog got ggt ggc gtc act cat ctg ctt gcc
arg val pro asp	cvs ala	val val	civ ala	ala ale gly gly val ile his leu leu ale
1621/541	· · · · · · · · · · · · · · · · · · ·		S3	1651/551
gag ctg atc gac	aac gcg	tta cac	tac too	tos ong son sos one get ogg gtt god ged
glu leu ile asp	asm ala	leu arg	tvr ser	ser pro the the pro val and val als als
i681/361			.0	1711/\$71
gca ato ggo ago	gaa ggc	agt git	etg etg	cas atc tog gat too ago eta ago atg acc
ala ile giy ser	glu gly	ser val	leŭ leŭ	ary ile ser asp ser gly lea gly met the
1741/581				1771/591
gat god gat egg	egg atq	gee ast	atg ogg	ets tas see see set sag ett acc ccc est
asp als asp arg	arg met	ala ass	met arq	led and als gly gly gle val the pro asp
1801/601				1831/611
agt god ogg cad	atg ggt	cty tto	gta gto	990 099 stg got 99t ogg cat 990 atc cga
ser ala arg his	met gly	Leu phe	val val	gly arg les als gly arg his gly ile arg
		•		The second secon

SEQ ID N° 21F (suite 1)

FIGURE 21F (suite 1)

86/185

1861/621	1891/631
gto gag ong ago gat oog gtg acc ggt gaa	
val gly led and gly pro val the gly glo	gln gly the gly the the ala glu val tyr
1921/641	1951/651
otg ocg eta get gtg eta gag ggg acg get	coa gog cag cog coa aag cog ogg gta ttt
leu pro leu ala val leu glu gly thr ala	pro ala gin pro pro lys pro arg val phe
1981/661	2011/671
gog ato sag ong ong tigt oot gas oen gog	and dee dur cod sed due dit con dee dee
ala ile lya pro pro cya pro glu pro ala 2041/681	ara ara asp pro thr asp var pro ara ara 2071/69:
ate ggg ceg eta eva eeg gte aeg ttg ete	
ile gly pro les pro pro val thr les les	mad also also appropriately fifth and control of the second contro
2101/701	2131/711
geo gas gto cog geo cag cog atg cag cag	egg egg egg gag eng aka aca coe tog nog
ala asp val pro ala gin pro met gin gin	ard ard ard glu led lys the pro trp tro
2161/721	2191/731
dad dar add att cwa cad ded coc was cas	cod ecc dos cos das ced cos ced ded ced
glu asp arg phe gln gln glu pro lys gln	
2221/741	2251/79;
cog coe goe aaa coe gog coa cog gog gge	cod der dan dan dan den ath tas såd odd
pro pro ala lys pro ela pro pro ela gly 2281/761	pro var asp asp asp var lie tyr arg arg
atg etc tec gag atg gtg ggt gas deg cac	
met les ser glu met val gly asp pro his	Giu leu ala bis ser nre sen leu sen ren
2341/781	2371/791
aag tog gtg tgg gas sas ggs tgg teg geg	ged ged gag ged ged gad aag dee gtg can
lys ser vel trp asp his gly trp ser ala	ala ala glu ala ala asp lya pro val gin
2401/801	2431/811
tee ego and gan tan age eth een ata ego	day one did det edd tra did ced did 244
ser and the asp tyr gly lew pro val and	din bio dik sis sid jen Ast bio dik siv
2461/821	2491/831
gog gog out gag gga oce gat egg gag eat	and dat des des des des pec see dan das
- ala vai pro glu gly pro asp arg glu his - 2521/841	1991/891 has are the are set 920 Gib Gib
off cat one dan ode ded eed edd over dod	
leu his pro gly arg ala pro arg his ala	ala ala val arg asp pro asp ala val arg
2581/861	2611/871
god too ato ago ago cat the ggo ggo gtg	ogo acc ggg ogg tog cat gcc ogc gag ago
ala ser ile ser ser his phe gly gly val	arg the gly arg ser his als arg glu ser
2641/981	
agt cag gga occ ast cag cas tgs	
ser gin gly pro son gio gin OPA	

SEQ ID N° 21F (suite 2)

FIGURE 217 (suite 2)

87/185

31/11 CTA CGA CAA GGC AAA GGA GCA CAG GGT GAA GCG TOO ACT GAC GGT CGC GGT AGC CGG AGC lau arg gin gly lys gly sia gin gly glu sis trp thr asp gly arg gly ser arg ser 91/31 CSC CAT TOT GOT CGC AGG TOT TTO CGG ATG TTO AAG CAA CAA GTO GAC TAG AGG AAG CGG ard his ser gly ard ard ser phe ard met phe lys gin gin val asp tyr ard lys ard 121/41 151/51 OPA asp his asp arg gly arg his asp gly lys pro arg arg arg ile arg ala glu gly 211/71 COT CAT CGA CGG TAA GGA CCA GAA CGT CAC CGG GTC TOT GGT GTG CAC AAC CGC GGC CGG arg his arg arg OCH gly pro glu arg his arg vel cys gly val his asn arg gly arg 243783 271/91 CAA TGT CAA CAT CGC GAT CGG CGG GGC GGC GAC CGG CAT TGC CGC CGT GGT CAC CGA CGG gin sys gin his arg asp arg arg gly gly asp arg his sys arg arg als his arg arg 331/111 CAA CCC TCC GGA GGT GAA GTC CGT TGG GCT CGG TAA CGT CAA CGG CGT CAC GCT GGG ATA gin pro ser gly gly glu val arg trp ala arg OCH arg gln arg arg his ala gly ile 361/121 391/131 CAC STC SGS CAC COS ACA SGS TAA CSC TCS SCA ACC AAS SAC SOU ASC CAC TAC AAS ATC his wal gly his ard the gly OCH ard see als the lys asp gly see his tyr lys ile

SEQ ID N° 22A

FIGURE 22A

32/11 TAC GAC AAG GCA AAG GAG CAC AGG GTG AAG CGT GGA CTG ACG STC GCG GTA GCC GGA GCC tyr asp lys ala lys glo his arg wal lys arg gly leu thr wal ale wal ala gly ale 32/31 SCC ATT CTG STC SCA SST CTT TCC SGA TST TCA ASC AAS ASS TCS ACT ACA SGA ASS SST ala ile len val ala gly len ser gly dyn ser ser ann lyn ser thr thr gly ser gly 152/51 giv the the the als als gly the the als see pro gly sis als see gly pro lys wal 212/71 OFC ATC GAC GOT AAG GAC CAG AAC GTC ACC GGG TOT GTG GTG TGC ACA ACC GCG GCC GGC wal ile asp gly lys asp gin aso wal the gly ser wal wal cys the the ala gly 242/81 272/91 ART STO ARC ATO GCG ATO GGC GGG GCG GCG ACO GGC ATT GCC GCC GTG CTC ACO GRO GGC ash valuen ile ala ile gly gly sla ala thr gly ile ala ala val ieu thr asp gly 302/101 332/111 and ect ecc gas sts has the ott egs etc sof had ste had soc ote hes etc sga the ash pro pro glu val lys ser val gly led gly ash val ash gly val the led gly tyr 362/121 392/131 ACS TOS SOC ACC GGA CAS SOT AAC SCT CGG CAA CCA AGG ACS GCA GCC ACT ACA AGA TO the see gly the gly gin gly ask als erg gin pro arg the ale ale the the arg

SEO ID N° 228

FIGURE 228

88/185

33/11 ACG ACA AGG CAA AGG AGC ACA GGG TGA AGC GTG GAC TGA CGG TCG CGG TAG CCG GAG CCG the the arg gin arg see the gly OPA see val asp OPA arg see arg AMB pro glu pro 63/21 93/31 CCA TTC TGG TCG CAG GTC TTT CCG GAT GTT CAA GCA ACA ACT CGA CTA CAG GAA GCG GTG pro phe trp ser gin val phe pro asp val gin ale the ser arg leu gin glu ale val 153/51 arg pro arg pro arg gin als arg arg gin als pro als pro his pro gly arg arg ser 193/61 213/71 TCA TOG ACG STA AGG ACC AGA ACG TCA COG GGT CTG TGG TGT GCA CAA CCG CGG CCG GCA ser ser thr val and the and the ser pro-gly les top dys ala gin pro-and pro-ala 273/91 ATO TOA ACA TOG OGA TOG GOG GGG CGG CGG CCG GCA TTG CCG CCG TGC TCA CCG ACG GCA met ser thr ser arg ser ala gly arg arg pro ala leu pro pro cya ser pro thr ala 303/101 333/111 ACC CTC CGG AGG TGA AGT CCG TTG GGC TCG GTA ACG TCA ACG GCG TCA CGC TGG GAF ACA thr lon and and OPA ser pro les gly ser was the see the als ser and trp asp the 363/121 393/131 COT COG GCA COG GAC AGG GTA ACG CTC GGC AAC CAA GGA CGG CAG CCA CTA CAA GAT C arg arg ala pro sep arg val the lew gly ass gin gly arg gin pro lew gin asp

SEQ ID N° 220

FIGURE 220

31/11 SCA CAA COG COG COG SCA ATS TOA ACA TOS OGA TOS SOS SOS COS COA COS SCA TTS COS ala gin pro any pro ala met sen the sen ary sen ale gly any any pro ala leu pro 61/21 91/31 CCG TGC TCA CCG ACG GCA ACC CTC CGG AGG TGA ACT CCG TTG GGC TCG GTA ACG TCA ACG pro cys ser pro thr ala thr led and and OPA ser pro led gly ser wal the ser the 151/51 GCG TCA CGC TGG GAT ACA CGT CGG GCA CCG GAC AGG GTA ACG CCT CGG CAA CCA AGG ACG als set and try asp the and and als pro sep ond values pro and gla pro and the 211/71 gea get act aca aga tea eag ggt gaa geg tog act gae ggt ege ogt age egg age ege ala ala the the arg see gin gly glu ala tep the asp gly arg gly see arg see arg 271/91 CAT TOT GOT CGC AGG TOT TTO CGG ATG TTO AAG CAA CAA GTO GAO TAC AGG AAG CGG TGA his ser gly arg arg ser phe arg met phe lys gln gln val asp tyr arg lys arg OPA 301/101 331/111 asp his asp arg gly arg his asp gly lys pro arg arg ser gly pro lys val val 381/121 391/131 ATC GAC GGT AAG GAC CAG AAC GTC ACC GGC TCC GTG GTG TGC ACA ACT GGG GGC GGC AAT ile asp gly lys asp gin asm val the gly ser vel val dys the the ala ala gly sem 471/141 481/151 GTC AAC ATC GCG ATC GGC GGG GCG GCG ACC GGC ATT GCC GCC GTG CTC ACC GAC GGC AAC val ash ile ala ile gly gly ala ala the gly ile ala ala val leg the sap gly ash 511/171 COT COS GAS STG AAG TOO STT GGS CTC GGT AAC GTC AAC GGC STC ACG CTG GGA TAC ACG pro pro glu val lys ser val gly leu gly ean val asn gly val the leu gly tyr the 541/181 571/191 TOG GGC ACC GGA CAG GGT AAC GCC TOG GCA ACC AAG GAC GGC AGC CAC TAC AAG ATC ser gly the gly gin gly asn ale ser ale the lys asp gly ser his tyr lys ile

SEQ ID N° 23A

89/185

32/11 CAC AAC CGC GGC CGG CAR TGT CAA CAT CGC GAT CGG CGG GGC GGC GGC CAT TGC CGC his asn and gly and glo dys glo his and asp and dry gly asp and his dys and 62/21 92/31 COT GCT CAC CGA CGG CAA CCC TCC GGA GGT GAA GTC CGT TGG GCT CGG TAA CGT CAA CGG arg ala his arg arg gin pro ser gly gly glu val arg trp als arg OCH arg glo arg 122/41 152/51 COT CAC GCT GGG ATA CAC GTC GGG CAC CGG ACA GGG TAA CGC CTC GGC AAC CAA GGA CGG arg his als gly ile his val gly his arg thr gly OCH arg led gly asn gln gly arg 182/61 212/71 CAS CCA CTA CAA GAT CAC AGG GTG AAG CGT GGA CTG ACG GTC GCG GTA GCC GGA GCC GCC glo pro leu gin asp his arg val lys arg gly leu the val als val als gly als sis 272/91 ATT CTG GTC GCA GGT CTT TCC GGA TGT TCA AGC AAC AAG TCG ACT ACA GGA AGC GGT GAG ile less values gly less ser gly dys ser ser asm lys ser thr thr gly ser gly glu 302/101 332/111 the the the als als gly the the als see pro-gly als als pro-gly arg arg see see 362/121 392/131 TOG ACG STA ASS ACC AGA ACS TEA ECG SET CEG TGG TGT SEA CAA ECG EGG CEG SEA ATG ser thr wal arg thr arg thr ser pro ala pro trp cys ala gln pro arg pro ala met 422/141 452/151 TCA ACA TOS CGA TOG GOG GGG CGG CGA COG GCA TTG COG CGG TGC TCA CGG ACG GCA ACC ser thr ser ard ser ale gly ard ard pro ale led pro pro cys ser pro the ale the 512/171 CTC CGG AGG TGA AGT CCG TTG GGC TCG GTA ACG TCA ACG GCG TCA CGC TGG GAT ACA CGT leu arg arg OPA ser pro leu gly ser val thr ser thr ala ser arg trp asp thr arg 542/181 . 572/191 COS SCA COS SAC AGO STA ACO COT COS CAA COA AGO ACO GOA GOO ACT ACA AGA TO arg ala pro asp arg val the pro arg gin pro arg the ala ala the the arg

SEQ ID N° 23B

FIGURE 238

90/185

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33/11
ACA ACC GCG GCC GGC AAT GTC AAC ATC GCG ATC GGC GGG GCG GCG ACC GGC ATT GCC GCC
thr thr als als gly asn val asn ile als ile gly gly als als thr gly ile als als
63/21
                                      93/31
GTG CTC ACC GAC GGC AAC CCT CCG GAG GTG AAG TCC GTT GGG CTC GGT AAC GTC AAC GGC
val leu thr asp gly asn pro pro glu val lys ser val gly leu gly asn val asn gly
123/41
                                      153/51
STO ACS CTS SGA TAC ACS TOS GGC ACC SGA CAS GGT AAC GCC TOS GCA ACC AAG GAD GGC
val the led gly typ the see gly the gly gln gly ash als see als the lys asp gly
183/61
                                      213/71
AGC CAC TAC AAG ATC ACA GGG TGA AGC GTG GAC TGA CGG TCG CGG TAG CCG CAG CCC CCA
ser his tyr lys ile thr gly OPA ser val asp OPA and ser and AMB pro glu pro pro
243/01
                                      273/91
TTC TGG TCG CAG GTC TTT CCG GAT GTT CAA GCA ACA ACT CGA CTA CAG GAA GCG GTG AGA
phe trp ser gin val phe pro asp val gim ala the ser arg led gin gid als val arg
                                      333/111
pro arg pro arg gla ala arg arg gla ala pro ala pro leu arg ala glu gly arg hiz
363/121
                                      393/131
CGA CGG TAA GGA CCA GAA CGT CAC CGG CTC CGT GGT GTG CAC AAC CGC GGC CGG CAA TGT
arg ard OCH gly pro glu arg his ard low arg gly val his asn arg gly arg gin cys
                                      453/151
CAA CAT COC GAT COG COC GOC GOC GAC COO CAT TOC COC COT GOT CAC CGA CGG CAA CCC
gin his ard asp ard erd gly gly sep ard his cys ard ard ala his ard ard gln pro-
483/161
                                      513/171
THE GGA GGT GAA GTO COT TOG GOT COG TAA COT CAA CGG CGT CAC GCT GGG ATA CAC GTO
ser gly gly glu val arg trp ale arg OCH arg gln arg arg his ala gly ile his val
543/181
                                      573/191
SOS CAC COS ACA SOS TAA COC CTC SOC AAC CAA GOA COG CAS CCA STA CAA GAT C
gly his arg the gly OCH ard led gly son gln gly arg gln pro led gln asp
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SEQ ID N° 23C

FIGURE 23C

91/185

31/11 CTA ACC ACA GGC AAA GGA GCA CAG GGT GAA GCG TGG ACT GAC GGT CGC GGT AGC CGG AGC led the the gly lys gly ala glo gly gld ala cep the asp gly ard gly see arg see 91/31 CGC CAT TOT GOT CGC AGG TOT TTC CGG ATG TTC AAG CAA CAA GTC GAC TAC AGG AAG CGG ard his ser gly ard ard ser phe ard met phe lys gin glo val asp tyr ard lys ard 121/41 181/81 OPA asp his asp arg gly arg his asp gly lys pro arg arg arg ser gly pro lys val 211/71 GTC ATC GAC GGT AAG GAC CAG AAC GTC ACC GGC TOO GTG GTG TGC ACA ACC GCG GCC GGC val lie asp gly lys asp gln asp val the gly see val val eys the the ala ala gly 241/81 271/91 AAT GTC AAC ATC GCG ATC GGC GGG GCG GCG ACC GCC ATT GCC GCC GTG GTC ACC GAC GGC ash values ile ale ile gly gly ale ale the gly ale ale ale val leu the asp gly 331/111 AAC CCT CCG GAG GTG AAG TOO GTT GGG CTC GGT AAC GTC AAC GGC GTC ACG CTG GGA TAC ash pro pro glu val lys ser val gly led gly ash val ash gly val the led gly tyr 361/121 391/131 ACG TOG GGC ACC GGA CAG GGT AAC GCC TOG GCA ACC AAG GAC GGC AGC CAC TAC AAG ATC the ser gly the gly gin gly asn als see als the lys asp gly see his tyr lys ile

SEQ ID N° 24A

FIGURE 24A

32/11 TAA CGA CAG GCA AAG SAG CAC AGG GTG AAG CGT GGA CTG ACG GTC GGG GTA GCC GGA GCC OCH arg gin als lys glu his arg val lys arg gly leu thr val sis val als gly als 92/31 GCC ATT CTG GTC GCA GGT CTT TCC GGA TGT TCA ACC ARC ARG TCG ACT ACA GGR AGC GGT als lie les values gly les ser gly dys ser ser asm lys ser the gly ser gly 152/51 glu the the the als als gly the the als see pro gly als als pro gly arg arg see 212/71 TCA TOG ACG GTA AGG ACC AGA ACG TOA COG GOT COG TOG TOT COA CAA COG CGG CCG GCA ser ser the val and the and the ser pro sia pro top dys ala gin pro and pro ala 242/81 232/91 ATS TEA ACA TOS CGA TOG GOG GOG CGG CGA CCG GCA TTG CCG CCG TGC TEA CCG ACG GCA met ser the ser and ser als gly and and pro als led pro pro dys ser pro the als 302/101 332/111 ACC CTC CGG AGG TGA AGT CCG TTG GGC TCG GTA ACG TCA ACG GCG TCA CGC TGG CAT ACA the law and and OPA ser pro less gly ser was the ser the aim see and top asp the 392/131 COT COS GCA COS GAC AGO STA AGO COT COS CAA COA AGO ACO GCA GUU ACT AGA AGA TO ard and als pro sep and wal the pro and dio pro and the dia als the the and

SEQ 10 N° 248

FIGURE 248

FEUILLE DE REMPLACEMENT (REGLE 26)

92/185

33/31

AAC GAC AGG CAA AGG AGC ACA GGG TGA AGC GTG GAC TGA CGG TCG CGG TAG CCG GAG CCG ash asp arg gin arg ser thr gly OPA ser val asp OPA arg ser arg AMB pro glu pro 63/21 93/31 CCA TTC TGG TCG CAG GTC TTT CCG GAT GTT CAA GCA ACA ACT CGA CTA CAG GAA GCG GTG pro phe trp ser gln val phe pro asp val gin ala the see any leu gin gio ala vel 123/41 153/51 arg pro arg pro arg gin ala arg arg gin ala pro ala pro leu arg ala giu giy arg 183/61 213/71 CAT CGA CGG TAA GGA CCA GAA CGT CAC CGG CTC CGT GGT GTG CAC AAC CGC GGC CGG CAA his are are OCM gly pro glu are his are less are gly val his as are gly are glo 273/91 TWI CAA CAT COC GAT CGG CGG GGC GAC CGG CAT TGC CGC CGT GCT CAC CGA CGG CAA cys gin his arg asp arg giy gly asp arg his cys arg arg ala his arg arg gin 303/101 333/111 CCC TCC GGA GGT GAA GTC CGT TGG GCT CGG TAA CGT CAA CGG CGT CAC GCT GGG ATA CAC pro ser gly gly glu val arg trp als arg OCH arg gla arg arg his ala gly ile his 363/121 393/131 GTC GGG CAC CGG ACA GGG TAA CGC CTC GGC AAC CAA GGA CGG CAG CCA CTA CAA GAT C val gly his arg thr gly OCH arg leu gly asn gin gly arg gin pro leu gln asp

SEQ ID N° 240

FIGURE 240

Amorce directe

5' ACC COC CGC AGC CTC TTG 3'

SEQ ID N° 25

FIGURE 25

Amorce inverse

5' CGA CCT TOG GAT TOG CCT 3'

SEQ ID N° 26

FIGURE 26

93/185

31/11 COT ACC AGC AAG AGC COA GGG OTT CAC AGG ACC TAA AAG GAG TAG CGC CCA TGG GCT TGA pro the see lys see pro gly lew his arg the OCH lys glu AMB arg pro trp als OPA 61/21 91/31 TOO ART TIT COT TOO GOD COG TOO AAT ACO ATO TOU AAG ACO AGO GAO GOO COG TGG TTG ser asn phe pro ser ala pro cys asn thr ile cys lys thr ser asp gly pro trp leu 151/51 COS TOS COE AGO TTO COO AAA COO GOT ATO GAS COT GOO GTA COO TTO TTO COA CIT GAT arg ser arg ser leu arg lys arg gly met asp pro ala val pro leu leu pro leu asp 181/61 211/71 GTC GTC GCT CTC CAC CCG TCG GGG GGC GAA AGC CAT TCC GAC ACT GGG ATC CTC AAA ACG val val ala lou his pro set gly gly glu ser his ser asp thr gly ile less lys the 271/91 TOG GOT GAG TOT CTG CAG GGC TOC GGG GAG CAG CCG ATC ATC ACC ATG TAC GAA CTG AAT ser als glu cys lew gln gly ser gly glu gln pro ile lie thr met tyr glu leu asn 301/101 331/111 AAG TOO COO COO COO GAC TTO CAG ACA TTT DIT GTG DIT TOS GIT GAG GOO GAG GOG AGG lys ser pro pro and asp phe gin the phe val val val ser val glu ala glu ala and 391/131 CTC ATT TOG CAG CAA GOG GTC TOO GGG TOG CAG CAT COT TGC GGC GAT CGC GGC GCA GTC leu ile ser gln gin als val ser gly ser gln his arg tys gly asp arg gly als vel 421/141 STC SGA CGA STC GTC STC AAC GAC GAC GAT C vel gly arg val val ash asp his asp

SEQ ID M* 27A

FIGURE 27A

31/11 CTA CCA GCA AGA GCC CAG GGC TTC ACA GGA CCT AAA AGG AGT AGC GCC CAT GGG CTT GAT les pro als and sid gin gly phe the gly pro lys and see san als his gly les asp 91/31 CCA ATT TTC CIT CCG CCC CGT GCA ATA CCA TCT GCA AGA CCA GCG ACG GCC CGT GGT TGC pro lie phe leu pro pro ang ala ile pro ser ala ang pro ala the ala ang gly cys 151/51 GET CGC GCA GOT TOC GGA AAC GGG GTA TGG ACC CTG CCG TAC CGT TGT TGC CAC TTG ATG gly arg ala ala cys gly asn gly val trp thr len pro tyr arg cys cys his len met 211/71 TOS TOS CTO TOO ACC COT COG GOG GOG AAA GOO ATT COG ACA CTG GOA TOO TOA AAA COT ser ser len ser thr ard ard dly ala lys als ile pro thr len gly ser ser lys ard 241/81 271/91 COG CTG AGT GTC TGC AGG GCT CCG GGG AGC AGC CGA TCA TCA CCA TGT ACG AAC TGA ATA ard les ser val eys and als pro-gly ser ser and ser son pro-dys thr son opA ile 331/111 AGT CCC CCC CGC GCG ACT TCC AGA CAT TTG TTG TGG TTT CGG TTG ACG CCG AGG CGA GGC ser pro pro arg als thr ser arg his low lew trp phe arg lew arg pro arg arg gly 391/131 TOA TIT OGG AGG AAG CGG TOT CCG GGT CGC AGG ATC GTT GCG GCG ATC GCG GCG CAG TCG ser pha arg ser lys arg ser pro gly arg ser ila val ala ala ile ala ala gin ser 421/141 TOS SAC SAS TOS TOS TOA ACS ACC ACS ATC ser asp glu ser ser ser thr thr thr ile

SEQ ID N° 278

94/185

33/11 TAC CAG CAA GAG CCC AGG GCT TCA CAG GAC CTA AAA GGA GTA GCG CCC ATG GGC TTG ATC tyr gln gln glu pro arg ala ser gln asp leu lys gly val ala pro met gly leu ile 63/21 93/31 CAA TIT TOO TIC OGO COO GIG CAA TAC CAT CIG CAA GAC CAG CGA CGG CCC GIG GIT GOG gln phe ser phe arg pro val gin tyr his leu gin asp gin arg arg pro val val ala 123/41 183/51 OTC GCG CAG CTT GCG GAA ACG GGG TAT GGA CCC TGC CGT ACC GTT GTT GCC ACT TGA TGT val ala gin lew ala glu thr gly tyr gly pro cys arg thr val val ala the OPA cys 183/81 213/71 CGT CGC TOT COA CCC GTC GGG GGG CGA AAG CCA TTC CGA CAC TGG GAT CCT CAA AAC GTC arg arg ser pro pro val gly gly arg lys pro phe arg his trp asp pro gln asn val 243/81 272/91 GGC TGA GTG TOT GCA GGG CTC CGG GGA GCA GCC GAT CAT CAC CAT GTA CGA ACT GAA TAA gly OFA val ser ala gly leu arg gly ala ala asp his his his val arg the glu OCH 303/101 333/111 OTC CCC CCC GCG CGA CTT CCA GAC ATT TOT TOT GCT TTC GCT TGA GGC CGA GGC GAG GCT val pro pro ala arg leu pro asp ile cys cys gly phe gly OPA gly arg gly glu ala 393/131 CAT TTO GOA GOA AGO GOT CTO COG GTO GOA GOA TOG TTG CGG CGA TOG CGG CGC AGT CGT his phe als ald ser gly led and valuate als ser led and and ser and and ser and 423/141 CGG ACG AGT CGT CGT CAA CGA CCA CGA TC arg thr ser arg arg gln arg pro arg

SEQ ID N° 27C

FIGURE 27C

MKTGTATTBBBLLAVLIALALPGAAVALLREPSATGASDPCAASEVAR TVGSVAKSMGDYLDSHPETNQVMTAVLQQQVGPGSVASLKAHFEANPK VASDLHALSQPLTULSTRCSLPISGLQAIGIMQAVQGARB

SEQ ID N° 28

FIGURE 28

GTGGGCAAGC TGCACCAACG GATCCGATAC GCGCTGGGTG AAGAACCCG AAGAAACCCG CAGGAGTTCT GAAGTCACCC GCCATGCTCA CTGACTGCGC	TEGTOGACGG OGGTTTCAGC OGACATOGAT OCGACAAGAA GGTGGACCGC ACCACTACGC ACCAGCTCCTC CCGGACAGGA GTAGCTCGCA	GACCGCCGTG GCTTGAAGGG GAAGGTGTGG TATGCCTGGCCT TATGCGCGGCC CATTCAAGCG GGTGCAAAGC CBACGCGCCC GGTTCAGGAA CACTAICGAC	GCTGCCGACA CTGCTTCTCG TTCAACGCCA ATCGACGGTC CAACGGCTGG GTCGTCGGCT TGGACTGTGG GGCGGCGACG ATTGTCACGT	AATCOGGACC ACTTGAGCCA AGGCAACAGCA ATGACAGCAT TCCCGACCGC GCTCGAACCG CTGACGTTGT GATGGACCTG GCGCCTATAG	ACTGCATCAG GATCAATGCC GGACTGGACTCC ACATGATGCC CCGGTTTGTC CAACGACACC CCAGCGTGCC CCAACGACAC	60 120 180 240 300 420 480 540 600 600
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SEQ ID Nº 29

95/185

MGKQLAALAALVGACMLAAGCTHVVDGTAVAADREGPLHQDPIPVFTSALEGLILDLSQINAALGATE MKVWFNAXAYWDWSKSVADKNCLAIDGPAQEKVYAGTGFTWTAMROQRLDDSIDDSKKRDHYAIQAVV GFPTAHDAEEFYSSSVQSWSSCSNRRFVEVTFTSGQDDAAWTVADVVHDNGMLSSSQVQEGGDGWTCO RALTARWNVTIDIVTCAYSQPDLVFTAIGIANQIAAKVAXQ

SEQ ID N° 30

FIGURE 30

61/21	2.2.00	\$15.00	8.2.3.	grä	343	ala	arg	grg	31/11 CGG CCC arg pro 91/31	alia	grģ	arç	arg	gly	Cy s	OPA	2313
121/41	Sec. 19.	967	ard	818	នរៈជ	\$100	arg	tyr	GCG GCA ala ala 151/51	gly	OCH	ths	thr	$b\varepsilon o$	thr	ala	arg
181/61	8×3	ren	ទព្ធ	gru	pro	TÄR	pro	382	CGC CTG arg les 211/71	ala	srg	phe	CGC arg	GCG &la	CAA gin	ard cec	gly GGC
GTT CTG	pro	bro cci	arg	rer	CAG gln	CGC arg	GGA gly	ggg gly	COT CGA	GAT asp	C						

SEQ ID N° 31A

FIGURE 31A

```
1/1

GGC GAA TAC CCG CGA GGG CAG CGC GAC GGC GGC CCT GCC GGC GCC GTG GCT GAA CAA

Q1y Q1u tyr pro arg g1y gin arg asp giy g1y pro ala g1y ala val ala ala g1u gin

61/21

CAC ATC CCA GCC GCC CAC GCT TCC GGT ATG CGG CAG GAT AAA CGA CCC CAA CAG CAC GAA

his 1le pro ala ala his ala ser g1y met arg g1n asp 1ys arg pro g1n g1n his g1u

151/51

CAC CAG GAT TGC GAC AAC CAA AGC CCT CGC GCC TGC CTC GAT TTC GCG CGC AAC GCG GCG

his g1n asp cys asp asn g1n ser pro arg ala crp lou asp phe ala arg asn ala ala

181/61

TTC TGC CGC CTC GAT CTC AGC GCG GAG GGC GTC GAG ATC

phe cys arg leu asp leu ser ala g1u g1y val g1u ile
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SEQ ID N° 318

FIGURE 31B

96/185

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1/1

GCS AAT ACC CSC SAG GGC ASC GCG ACG GCG GCC CTG CCG CCG CCG TGG CTG CTG AAC AAC ala asn thr arg glu gly ser als thr als als leu pro als pro trp leu leu asn asn 61/21

ACA TCC CAG CCG GGC ACG CTT CCG GTA TGC GGC AGG ACG ACG CCC AAC AGG ACG AAC thr ser gin pro arg thr leu pro val cys gly arg ils asn asp pro asn ser thr asn 121/41

ACC AGG ATT GCG ACA ACC AAA GCC CTC GGG CCT GGC TGG ATT TGG CGC GCA ACG CGC CGT thr arg ils als thr thx lys als leu als pro gly ser ile ser arg als thr arg arg 151/61

TCT GCC GCC TCG ATC TCA GCG CGG AGG GGG TCG AGA TC
ser als als ser ile ser als arg arg als ser arg
```

SEQ ID N° 31C

FIGURE 31C

```
ORF d'après Cole et al. (Nature 393:537-544) et contenant seqüiA
3/1
                                        31/11
taa acq acc cca aca gos ega aca cca ggs tig ega cas ees asg occ teg ege etg get
oth the the pro the als and the pro gly law and din pro lys pro see and law als
                                         91/31
ega tet ege geg caa ege gge get etg eeg eet ega tet eng ege gga ggg egt ega gat
and bus sud ays div and dil Asy per bus bus sed sen div sud dil dil sud and ash
121/41
                                        151/51
ece egg egt egt git egt gge tes tes tet ges tet tre ggg ett gge ege get gse egg
bee sed sed and hal sed div see son our six see son div led div sed six app and
                                         211/71
cad occ dae occ ask car dec cad dec dae dde ded con edd etd eec dde ddr ded ede
gin pro eap pro and his ala gin ala asp gly ale pro and led pro gly gly wal and
241/81
                                        271/91
are den dan ded dar ded ded ded dat sad dan den dan dre dan dan dan dad ded ded sed
val ala gly ala gly ale ale val gly gln esp als gly val gly asp glu val val arg
                                        331/111
age age tto ggt gad att agt ggt gat gad gtd gdd ggg acg dad gdd agg atg gdd agg
arg arg phe gly asp led arg gly asp asp val ala gly the his als arg led ala gly
361/121
                                        391/131
gat day and ose ead ded een are ded ede eed een det cat ded ede ede day day die
gly glu val his gin als pro val als are pro pro als his als are are eap gly val
421/141
                                         401/161
ett geg enn the sec gat age eac eag eac ete gan age eta ees gan eag oge geg git
led ala pro phe pro gly gly his gln his led app gly led pro asp gln gly ala vel
481/161
                                        501/171
age the eag ega gat tig eit thig eag ege gat eag gog tie ara gog the eit eac age
gly phe gin arg asp les les les gin arg asp gin als phe ile als phe les his asm
543/381
                                        571/193
gge tet egg cag etg tee giv gag tig ege gge egg igt eee ggg eeg ett oga gra tig
gly phe arg gin law ser val glu law arg gly arg cys pro gly pro law gly val law
603/201
                                         631/213
gas ggt sas tộc gọc các gas đọi đào có đạo các các đạo địc các các đốc các đó
glu giy lys tys gly arg glu ala gly pro ala his his val glu arg gly arg glu val
                                         691/231
are the dar are see dad das see dee der sed etc dar the ear can das erd cad des
lau pha gly leu pro gly glu thr asp asp gin ile gly gly asn acg gly met acg asp
721/241
                                         781/251
ggo ogo cog car gog tit gat gat gor gag gra gog ett gge acg ata gga cog cog car
gly arg pro his ala leu asp asp ala glu val ala leu gly thr lie gly pro pro his
781/261
                                        811/271
out gog cag gat beg gto gga too gga oto tag
ard ala gin asp pro vai diy ser diy leu AMS
```

SEQ ID N° 31F

97/185

81/21	AST CAL	್ ಬಚಚ	giu th	: lys	164	333	31/11 tcg gca ser ala 91/31	edq	262	adq	gly	gly	bro	lys	суа
121/41	TAB ASS	. 110	gin ly	100	ser	āzh.	ttg ago leu ser 191/51	114	885	arg	phe	ile	ala	ile	äsp
181/61	årå bue	* ***	arg me	. AST	giu	ala	ete gge leu gly 211/71	äŗħ	vai	glu	val	cys	862	thr	3,43
241/81	करत करा	- tys	giu im	s gily	thr	val	stg gag len glu 271/91	nis	ala	gly	ätg	gln	val	ile	asp
301/301 grA bro	ERK BLA	. Leu	asn ty.	: Val	arg	ala.	cgc cag arg gin 331/111	YSİ	the	thr	glu	262	88B	gly	gac asp
thi dil	ogo ato	asa lys	ard dr	g cag gln	ttg leu	pbe edq	ttg tcg læu ser	ser	otg læu	ctg leu	egt arg	tog ser	atq met	atc ile	

SEQ ID N° 32A

FIGURE 32A

1/1		31/11	
gao tgg tgt ac	s ogg ægæ oca ago tga a		GCG GGC GES act gra
asp trp cys th:	r arg arg pro ser OPA t	r arg his ser pro ser	ala siy leu zer yat
61/21		91/31	
tag tga agg to:	: tto aga asc tgt cgg g	t tga goa boa aco ggt	tos tog ops the set
AME OFA arg se:	phe arg ash cys arg a	a OPA ale ser thr gly	ser ser ard leg thr
121/41		151/51	·
tog tog gtt to	s ogo gga tog tog egg c	o tog gog gog tog agg	tat qua qua coa quo
ser ser var se:	: arg gly trp ser arg p	o ser ala ala ser arg	tyr ala ala pro pro
121/21		211/71	.*
cật tậc gặg ac	: acg asc tog goa ogg t	e tyg ago acg cog gac	god agg tog ttg acg
ard cha dia ru:	thr ash trp ala arg c	's trp ser thr pro asp	ala arg ser leu thr
241/21		271/91	
dàc cda cca ca:	r tga act atg tgc gcg c	o got agg toa cea ceg	aga gca atg gcg act
dia and bro and	; OPA thr met cys ala 1:	u ala arg ser pro pro-	arg ala met ala thr
301/101		331/111	
acd ddc dca to:	. was des ads ads put t	t tgt egt ego tge tge	ght oga tga to
thr gly als se	r aso ala ser ser cys pi	m dys arg arg dys dys	Val and OPA

SEQ ID N° 328

FIGURE 32B

98/185

3/1 31/11 act dat ata can das dat cas det das ett das ett ett ett ett edd edd det tas ett tet the gly wal his gly asp gin als glu leu gly ils leu leu arg arg als OCH wal ser 91/31 agt gaa ggt cal toa gaa act gto ggg elt gag cat caa cog gtt cat ogo gat tga ott ser glu gly his ser glu the val gly leu glu his gln pro val his arg asp opa lau 121/41 151/51 egt egg tit ege gog gat ggt ega gge oot egg egg egt ega ggt atg eag eae eae eee ard are phe are ala asp gly are gly pro are are are are gly met gln his his pro 101/61 211/71 git gog gga ota oga act ggg cao ggt get gga goa ogt egg acg coa ggt car tga egg val ala gly les and the gly his gly ala gly ala and and the pro gly his opa and 241/81 gos gas ope que gaa sta tot gog oge tog oca got can ost ost oga gag eau tog oga ota ala asp and ala glu leu dys ala and sen pro gly his his and glu gln top and leu 301/101 331/111 ogy gog cat cas and now gos got got tot gto got got got gog ton gat gat o ary ala his gin the pro ala val val phe val val ala ala ala phe asp asp

SEO ID N° 320

FIGURE 320

sequence RyOSZIc prédits par Cols et al. (Nature 393:837-544) et contenant seq 32A aty agt gar ggn gag age gee geg eng tyg gea egg etc tee gag tea goa tre eep gat Met ser asp gly glu ser als als pro trp als arg les ser glu ser als phe pro asp 91/31 dar der dae eda rad are wed dru eed een dee wem râd drû deu dee ead âde eed edû gly val amp and the file the val pro pro ala the top val ale ala gin gly pro and 151/81 gas acc sag ask gir ope tot sat gos are ggs gos git agt gtg gos gat sig ats gos asp the gin asn val gly eys his als the gly als valuer values as sep len ile als 181/61 211/71 agg ste ggs occ get tit set gas ets set and has ege cat git god occ gas nee gag ard lew gly pro ala phe pro asp lew pro thr his ard his val ala pro glu pro glu 241/81 271/91 coa tec ggs sgs ggs seg aag gte cas gas gas ges gas gas sag sag gas acc gag get pro ser gly and gly pro lys wal his asp asp ala asp asp gin din asp the glu ala 301/101 331/111 ate see ate our see can ted ete gas the ote tog sag off one can see egy gos see ile ala ile pro ala his ser leu glu phe leu ser glu leu pro asp leu arg ala ala 361/121 391/131 aso tat dug ogo goo gas sas gos ego ego egt gaa oos gag eta oos ggo aag cag eta ass ann tyr pro and als sop his als and and did pro did led pro diy lys din led the 421/141 451/151 gya tog got oga gig ogg oca tig ogg ato oge ega asg tog oce gog oco god aag oca gly ser ale and val and pro led and ile and and the ser pro ale pro ale lys pro 481/181 511/171 geg eeg ase tee gge egg ege eeg atg gtg etg gee geg ege teg etg geg get etg ttt ala pro ash ser gly arg arg pro mot val leu ala ala arg ner leu ala ala leu pho 841/182 \$71/191 ged get ong geg big geg ong acc gge ggg ges ngg eag ngg age geg neg asg sac age ala ala leu ala leu ala leu thr gly gly ala trp gin trp ser ala ser lys asn ser £01/263 \$31/211 ngg stg sac atg gta age gog ote gan ong hat tog gge gan ath gto ase one age ggg arg leu ann met val ser als leu amp pro his ser gly amp ile val ann pro ser gly

SEO ID N° 32D

99/105

661/221							691/231								
cad car ggc gac	989	880	232	era	ಜಕಪ	ate		080	to a to	(2) (2) (1)	ese es	2332333	ويمويني	A 22.57	and the same
gln his gly asp	glu	830	phe	leu	ieu	val	gly met	330	ser	850	ala	aja	37.7	asn	37.2
721/241							751/251								
war atc ggc gcc	ପୃଫ୍ରପ	gae	gee	gag	$\mathbb{Q}\otimes\mathbb{Q}$	$\mathfrak{g} \in \mathfrak{C}$	ààc ààc	gea	oge.	tog	gac	200	98C	azg	ata
asm lie gly ala	$a_{1\lambda}$	93.D	જારે સ	glu	923	83.9	ara ara	સો સ	arş	307	425	the	važ	mer	1ess
701/261							811/271								
gtc asc att cog	ପୁର ଓ	880	age	gag	cáš	350	පිදුව කියයි	àpà	ರಿದಡ್ಡ	2,00	000	cgc	gac	ccq	gog
val asn ile pro 841/281	913	202	arg	\$10	arg	vas	V21 212	VS I	362	20,00	202.22	xzd	æsp	7.8.12	3.3
	033	ie nem	20022-00	000000	de seeses	00.00 cm	871/291	W. C. C.	ou sa de						2
atc act cca atc	618	engen.	Again Amil	a ya	#-2009 2-2008	200	യായ തുക്കൂ	400 C	33.0	3.200 3838.00	282	gga	ಎದರ	280	280
901/301	3000	03.0	2000	0000-00	erante.	20:00:00	931/313	888.00	323	7.7.3	~ 3 ×	ST.	\$1500	775	53.2.
gac gag aag acg	0.03	800	ato	300	823	803		tac	34555	and m	ann	20.00	andr gy	\$ 8 m	46.500,00
asp glu lys thr	gly	thr	net.	ϔy.	oro	350	les val	tvr	thr	23.0 27.3	thr	Evs.	ે હ્યુ	29.45%	arson and
961/321				J 3.	•		991/331			20.00	00.0	w.y.w			400
goa tto too tto	ggc	ggg	000	রঙ্গন্ত	tyt	eta	gtg aag	985	att	១ឧទ	સહસ	ete	toa	arasa:	ttos
ala phe ser phe	378.	âŗķ	org	lys	cys	leu	val lys	V3(1)	118	ខ្លុំវិក	173	184	ser	gly	300
1021/341							1051/35	i							
ago ato aac ogg	tts	apo	ācā	332	285	ete.	ate dat	223	$\Delta z \Delta$	ogg	323	$\mathfrak{G} \subseteq \mathfrak{G}$	333	\$ac	ಇರಿಲ
ser ile asn arg	5000	27.0	828	773	gesp	phe			31.3	arg	met	V&3.	glu	ala	leu
1081/361	and to	ale es se	A		~ ~ ~		1111/37								
gge gge gte gag	G 2.88	230	age	48000 444.00	88.00.00 446.00	ಭದರ್ಷ	era ead	\$80°	282	युक्क	ক্রক্ট	32c	∉©₫.	dxd	623
gly gly val glu 1141/381	N-98.T	0.5.2	30 X	USLE	THT.	bzo	100 and		EAR	dim	100	arx	2332	683	163
dwa cec doc dds	esere.	20120-201	enteres	A 45	P	erenes.			en ski en	W W W	N:0 W	and a			
glu his ala gly	8 E.S.	orles	vai.	118	842	14.3 14. 14.20.14	man the	13 E 25	300	25.00	Artist Science	भू अपूर्व सम्बद्ध	age:	280 C	680
1201/401	%	******				3.2.3	1231/41		, ac he, ca.	30.193.4	* 3 *	× 26.30	41.7	37.72	SE 2 13
cag gto acc acc	gag:	ෂගුග	aat	ggs	gae	tac	999 000	ate	233	cac	േകദ	മകര	200	623	\$ \$5.00
gln val the the	glu	288	3.32	gly	233	tyz	gly ard	3.LE	178	8.50	ain	gin	168	one	Less
1261/421							1291/43	8						-	
tog tog atg etg	272	tion	300	200	200	3455.08	STREET SOME	85.05.00		F1 3 13	20.00				
			44.00.00	936 30400	and to	cereine.	Shopping experien	Section Section	0.00	45.00	100	aga	० ५ ५	\$4.00 B	880
ser ser leu leu	arg	362	met	ile	262	thr	sap thr	leu	phe	8-800 8-800	Leu	8-82.	end edd	eto Leu	88C 88T
ser ser leu leu 1321/461	srg	362	met	116	\$6T	thr	map thr 1351/45	leu L	phe	& 583 & 583	leu	382	arg	leu	8371
ser ser leu 1321/441 aac gto gto aac	arg atg	ree	met atc	ile	ser	thr ago	map the 1351/45 tac gtg	leu L gac	phe	850	leu aad	ser acc	arg	les sac	&sn ctc
ser ser leu leu 1321/461 aac gto gto aac aan val val aan	arg atg	ree	met atc	ile	ser	thr ago	map the 1351/45 tac geg tyr val	leu i gac asp	phe	850	leu aad	ser acc	arg	les sac	&sn ctc
ser ser leg leg 1321/4%1 aac gtr gtr aac asn val val aan 1381/461	arg atg met	tte phe	met atc ile	ile ggt gly	227 227 267	thr ago ser	map the 1351/45 tac geg tyr val 1411/47	leu : gac asp :	eac ean	ass gro val	leu aag lys	ser acc thr	arq asa lys	leu gac asp	asn ctg lsu
ser ser leg leg 1321/4%1 aac gtr gte aac asn val val aan 1381/461 gre gaa ete ggt	arg stg met	tto phe tcg	met atc ile ttg	ile ggt gly cæg	ser sac san	thr ago ser atg	map the 1351/45 tac gtg tyr val 1411/47 gog goo	leu gac asp i euu	phe sac san	ann guc val	leu aag lys acc	ser acc thr	arg ass lys	led geo spp	etg lsu
ser ser leg leg 1321/481 asc gtr gtr sac asn val val sen 1381/461 gtr gas etr ggt val gly leg gly	arg stg met	tto phe tcg	met atc ile ttg	ile ggt gly cæg	ser sac san	thr ago ser atg	map the 1351/45 tac gtg tyr val 1411/47 gog goo als als	614 844 885 600 160	phe sac san	ann guc val	leu aag lys acc	ser acc thr	arg ass lys	led geo spp	etg lsu
ser ser leg leg 1321/481 aac gtr gtc aac asn val val aan 1381/461 gtc gaa ctc ggt val glu leg gly 1881/481	arg stg met cga arg	tto phe tog ser	met atc ile ttg leu	ile ggt gly cæg glo	ser sac san cat his	thr ago ser atg met	map thr 1351/45 tac gtg tyr val 1411/47 gcg gcc ala ala 1471/49	leu gac asp i giy giy	phe esc esc csc his	arm yal gro yal	imu aag lys aog the	acc thr trc phe	arq asa lys gtg vsl	ieu geo asp eco thr	esn Ctg Lsu Gtt Val
ser ser leg leg 1321/481 aac gtr gtc aac asn val val aan 1381/461 gtc gaa ctc ggt val glu leg gly 1881/481 cog acc ggt ata	arg stg met cgs arg	tte phe tcg ser	met atc ile ttg leu cag	ggt gly cag gln	ser sac san cat his	ago ser atg met	map the 1351/45 tac geg tyr val 1411/47 geg gec ala ala 1471/49 geg ccc	led ; gac sap ; gly ; ; acq	phe sac san cac his	ass gto val gto val	leu asq lys acq thr	acc thr rec phe	arg ass lys gtg val	leu gac anp aco thr	esn Ctg Lsu grt grt val
ser ser leg leg 1321/481 aac gtr gtc aac asn val val aan 1381/461 gtc gaa ctc ggt val glu leg gly 1881/481	arg stg met cgs arg	tte phe tcg ser	met atc ile ttg leu cag	ggt gly cag gln	ser sac san cat his	ago ser atg met	map the 1351/45 tac geg tyr val 1411/47 geg gec ala ala 1471/49 geg ccc	bto 2013 214 214 227 220 220 220 220 220 220 220	phe sac san cac his	ass gto val gto val	leu asq lys acq thr	acc thr rec phe	arg ass lys gtg val	leu gac anp aco thr	esn Ctg Lsu grt grt val
ser ser lew lew 1321/461 aac gtr gte aac asn val val asn 1381/461 gtc gaa ctc ggt val glw lew gly lest/481 cog acc ggt ata pro thr giy ile 1501/501 ctt ttc acc gcc	arg stg ser cgs arg acc acc	tto phe tcg ser ser ser	met atc ils ttg ieu cag gin	ggt gly cag gln sac asn	ser sec sen cat his qqq qly	ago aer atg met gao asp	### thr 1351/45 tac grg tyr val 1411/47 gog goo #14 816 gag coo giu pro 1631/51	leu yac sap gly cuy pro ctu	phe sac san cac his cac arg	son gto yal gto yal son thr	and Lys acq thr too ser	acc thr ttc phe gac asp	arg ass lys gtg val atg atg	leu gac anp aco thr aag lys	san Ctg lau gtt val gug ala
ser ser lew lew 1321/481 aac gtr gte aac asn val val asn 1381/461 gtc gaa ctc ggt val glw lew gly lest/481 cog acc ggt ata pro thr giy ile 1501/501 ctt ttc acc gcc lew phe thr als	arg stg ser cgs arg acc acc	tto phe tcg ser ser ser	met atc ils ttg ieu cag gin	ggt gly cag gln sac asn	ser sec sen cat his qqq qly	ago aer atg met gao asp	### thr 1351/45 tac grg tyr val 1411/47 gog goo #1471/40 gag coc giu pro 1831/51 ctg coc leu pro	leu tota t	phe sac san cac his cac arg	son gto yal gto yal son thr	and Lys acq thr too ser	acc thr ttc phe gac asp	arg ass lys gtg val atg atg	leu gac anp aco thr aag lys	san Ctg lau gtt val gug ala
ser ser lew lew 1321/461 and gto gto gto and ann val val en 1381/461 gto gan cto ggt val glu lew gly lest/481 cog acc ggt ata gro the giy ile 1501/501 ctt tto acc gco lew phe the ala 1561/521	arg atg set cga arg acc acc the	tto phe tcy ser sar sap ato ile	met atc ile ttc ieu cag gin gac asp	ggt gly cag gln sac asn gac	aar aar cat his ggc gly gat asp	ago aer atg met gac asp ecq pro	### thr 1351/45 tac grg tyr val 1411/47 gog goc ### ### #### #### #### #### #### ####	; er i er i er i bro er i er i er i er i	phe sac sac this topt arg gaa giu	ann gro val gro val acn thr asc	leu aeg lya acg the toc see get	ser ecc thr rrc phe gac asp cac his	arg ass lys gtg val atg atg asc asc	les gec acp sco thr sag lys gcc ala	asn Cig Jsu Gug ala Cag gin
ser ser lew lew 1321/481 aac gtc gtc aac asn val val aen 1381/461 gtc gaa ctc ggt val glu lew gly last/481 cog acc ggt ata pro thr gly ile 1501/501 ctr ttc acc gcc lew ghe thr als 1561/521 ogt ctg ggc aac	arg atg atg cga arg acc thr acc	tte phe tcq ser ser ser ser ile	met atc ils ttq ieu cag gin gac asp	ggt gly cag gln sac asn gac asp	act sac sac cat his ggc gly gat ass	ago ago asp cog pro	### the 1351/45 tac gray tye val 1411/47 gray gram ### ### ### ### ### ### ### ### ### #	leu i gac asp i gry gry i gry gro i cty toty leu leu acc	phe sac sac his cot arg gas giu	acco yet according yet accordin	and the too see gat asp	ser ecc thr rrc phe pac esp cac his	arg ass lys gtg val atg met asc asc	leu gac anp acc thr aag lys gcc als	asn Cig Jsu Grt Val Gog ala Cag gin
ser ser lew lew 1321/461 and gtr gtr ser and ann val val ann 1381/461 gtr gam der ggt val glw lew glw lest/481 cog acc ggr ata pro thr glw lew ghr tru acc groleu ghe thr ala 1561/521 cgt ctg ggr and ang lew gly san	arg atg atg cga arg acc thr acc	tte phe tcq ser ser ser ser ile	met atc ils ttq ieu cag gin gac asp	ggt gly cag gln sac asn gac asp	act sac sac cat his ggc gly gat ass	ago ago asp cog pro	### thr 1351/45 tac grg tyr val 1411/47 gog god ### 400 gag cod giu pro 1831/51 crg cod led pro 1891/53 ####################################	leu i i sap i sap i say coa pro i coa pro i coa pro coa i coa ada doa doa doa doa doa doa	phe sac sac his cot arg gas giu	acco yet according yet accordin	and the too see gat asp	ser ecc thr rrc phe pac esp cac his	arg ass lys gtg val atg met asc asc	leu gac anp acc thr aag lys gcc als	asn Cig Jsu Grt Val Gog ala Cag gin
ser ser lew lew 1321/481 and gto gto and and an val val and 1381/461 gto gas cto ggt val glw lew gly last/481 cog acc ggt ata pro the gly ile 1501/501 cto too acc for lew phe the als 1661/521 cgt ctg ggo and arg lew gly asm 1621/541	arg stg ser cga arg arg arc thr	tec phe ccq ser ser ser stc ile ccc pro	met atc ils ttq ieu cag gin gac asp	tie ggt gly cag gln asc asc asc	ser sac cat his ggo gly gat asp ccc	ago ago atg met gao asp cog pro	### the ### th	160 500 800 800 800 800 800 100 10	phe sac cac his cot arg gas giu asg lyz	ann gto val gto val acc thr asc asn asg	and lys and that the the sac gat and gat	aer ecc thr trc phe gec asp cac his	ass lys gtg atg asc asc cag gin	les ges and thr sag lys ges als	asn Ctq Isu Gtt Val Gug ala Cag gin Ggt
ser ser lew lew 1321/481 and gto gto see and 1381/461 gto gan out ggt val glu lew gly 1841/481 cog acc sgr ata pro the gly ile 1501/501 ctr tto acc acc goo lew ghe the als 1561/521 cgt ctg ggc and arg lew gly asm 1621/541 ctg acc and gag	arg stg sec cgs arg acc acc thc acc acc	tec phe tcq ser ser ser stc ile ccc pro	met ils ils ies cas gin gas sop cog sor	tie ggt gly cag gln asc asc asc asc	ser ser ser cat his ggo gly gat sep ccc pro	att bro cod bro cod sec sec sec sec sec sec sec sec sec sec	### the ### the #### the #### the #### the #### the #### the #### the ##### the ##########	leu pec sap sap cuy pro pro tota	phe sac cac his cot arg gas giu asg lys	ann gto val gto val acc thr asc asn asg iya	leu aeg lye aeg thr tee ser ger aeg	ser ecc thr ecc phe esc ssp cac his ccq pro	arg asa lya gtg val atg met asc sen cag gin	les gar anp anp thr asq tys gar ala asa	asn ctq lsu grt va: gug ala cag gin ggt giy exp
ser ser lew lew 1321/481 and gto gto see and 1381/461 gto gan out ggt val giv lew gly last/481 cog acc sgr ata pro the giv lew gly lew ghe the ghe the als 1561/521 cgt ctg ggc and arg lew gly san 1621/541 ctg acc and gay lew the and gly see lew gay and lew the and gly che the acc and gay lew the and gly che the acc and gay lew the and gly che the acc and gay lew the and gly che the acc and gay lew the acc acc gay lew the a	arg stg sec cgs arg acc acc thc acc acc	tec phe tcq ser ser ser stc ile ccc pro	met ils ils ies cas gin gas sop cog sor	tie ggt gly cag gln asc asc asc asc	ser ser ser cat his ggo gly gat sep ccc pro	att bro cod bro cod sec sec sec sec sec sec sec sec sec sec	map the 1351/45 tac gray tyr val 1411/47 gray grad als als 1471/40 gray pro 1831/51 cray pro 1851/53 acc acc the	leu i i got sap cty cty cty cty sco fot cty cty cty cty cty cty cty c	phe sac cac his cot arg gas giu asg lys	ann gto val gto val acc thr asc san asg iya	leu aeg lye aeg thr tee ser ger aeg	ser ecc thr ecc phe esc ssp csc his ccg pro	arg asa lya gtg val atg met asc sen cag gin	les gar anp anp thr asq tys gar ala asa	asn ctq lsu grt va: gug ala cag gin ggt giy exp
ser ser lew lew 1321/481 aac gtc gtc aac asn val val aan 1381/461 gtc gaa ctc ggt val glw lew gly lest/481 cog acc ggt ata pro thr gly lle 1501/501 ctt ttc acc gcc lew ghe thr als 1561/521 cgt ctg ggc aac arg lew gly asn 1621/541 ctg acc aac gag lew thr asn glw 1681/561	arg stg ser cas acc acc acc thr	ter the toy ser sar sar sto cop pro	met atc ils ttg ieu cag gln tcg sec tcg	ile ggt gly cag gln sac san gac aop acc thr cag gin	ser	Att Asi	map the 1351/45 tac gray tyr val 1411/47 gog good als als 1471/40 gag occ giu pro 1831/51 cra pro 1891/80 acc acc the the the 1451/87 the the 1711/87	leu jec jec jec jec jec jec jec j	pho eac cac his cost eas giu asg iya tog ser	asso geo val geo val acca asso iya	leu aag iya ang the toc ser qat asp qeq ala asa	acc thr trc phe cac his cog gad gad	asq asa lys gtg val atg met asc asq gin gtc vai	leu gac anp sco thr sag lys gcc als gcg als acs thr	asn Ctg Isu Gtt Val Gug ala Cag gin Ggt giy Qtg Val
ser ser lew lew 1321/481 and gto gto see and ann val val ann 1381/461 gto gan one ggt ata gto gto the giv lew 201/201 out to acc good lew 201/201 out to gan and 1621/541 out gan ann giv 1681/561 out gan gan gan ann giv 1681/561 out gan	arg arg respondence of the control o	too phe coy ser sto coy pro cay gin acc	met atc ils ttg ieu cag gan tcg ser cac his	ile ggt gly cag gln sac san gac sap acc thr cag gin cag	sar sar cat his ggc gly gat asp ccg gin ccag	dat Asi Section of the Asia Section of the Asi	map the 1351/45 tac gray tyr val 1411/47 gog good als als 1471/40 gag occ giu pro 1831/51 car pro 1851/80 acc acc the the thr thr 1711/87 tag good tag good tag god ta	lew jectory phe sac can cac his copt arg gas alva tog ser	ann que val que thr asc asq iya cca pro	leu asg iys ang the toc ser qat asp quq ala asa	ser acc thr trc phe cac his cog glu gat	asq asa lys gtg val atg met asc asq gin gtc val	leu gac anp sco thr sag lys gcc als gcc als cor thr cor	asn ctg lsu gtt val gug ala cag gln ggt gty val	
ser ser lew lew 1321/481 aac gtc gtc aac asn val val aan 1381/461 gtc gaa ctc ggt val glw lew gly lest/481 cog acc ggt ata pro thr gly lle 1501/501 ctt ttc acc gcc lew ghe thr als 1561/521 cgt ctg ggc aac arg lew gly asn 1621/541 ctg acc aac gag lew thr asn glw 1681/561	arg arg respondence of the control o	too phe coy ser sto coy pro cay gin acc	met atc ils ttg ieu cag gan tcg ser cac his	ile ggt gly cag gln sac san gac sap acc thr cag gin	sar sar cat his ggc gly gat asp ccg gin ccag	dat Asi Section of the Asia Section of the Asi	map the 1351/45 tac gray tyr val 1411/47 gog good als als 1471/40 gag occ giu pro 1831/51 car pro 1851/80 acc acc the the thr thr 1711/87 tag good tag good tag god ta	leu i got asp i got sy gi gi cog l cog thu thu l acc thx l acc thx	phe sac can cac his copt arg gas alva tog ser	ann que val que thr asc asq iya cca pro	leu asg iys ang the toc ser qat asp quq ala asa	ser acc thr trc phe cac his cog glu gat	asq asa lys gtg val atg met asc asq gin gtc val	leu gac anp sco thr sag lys gcc als gcc als cor thr cor	asn ctg lsu gtt val gug ala cag gln ggt gty val
ser ser lew lew 1321/481 aac gtc gtc sac aan val val aen 1381/461 gtc gaa ctc ggt val glu lew gly last/481 cog acc ggt ata pro thr gly ile 1501/501 ctt ttc acc gcc lew ghe thr als 1561/521 cgt ctg ggc aac arg lew gly asn 1621/541 ctg acc aac gag lew thr aen glu 1681/561 cag gtc tot aac gln val ser aso 1741/581	arg stg sec cas acc acc acc acc acc acc acc acc ac	toto phe toto ser esp ato oca pro cas gin acc chr	met atc ils ttg ieu csg gln gac asp tcg ser cac his gg;	ile ggt gly cag gln sac san gac thx cag gin cag gin	ser	dil dat dat dat dat dat dat dat dat dat dat	map the 1351/45 tac gray tyr val 1411/47 gog good als als 1471/40 gag occ giu pro 1831/51 ccc pro 1851/83 acc acc the	leu	phe sac cac his copt as give as give tog ser and the top the t	asso yeto yeto yeto yeto yeto yeto yeto yet	leu aag iys ang thr tocc ser gst asp gog ala asa iys socc thr	ser acc thr trc phe gac asp cac his ccg pro gag glu gat asp	arq ass lys gtg val atg met asc asn cag gin gtc cag gin	leu gac anp aco thr asag lys gcc als acs thr ctc ieu	asn ctq lsu gct val gcg ala cag gln ggt yal exy val
mer ser lew lew 1321/481 aac gtc gtc aac asn val val asn 1381/461 gtc gaa ctc ggt val gly lew gly lew lew gly lew gly lew grothr gly ile 1501/501 ctt ttc acc gcc lew ghe the ala 1561/521 cgt ctg ggc aac arg lew gly asn 1621/541 ctg acc sac gag lew the asn glw lew the asn glw 1561/561 cag gtc tct aac gly 1741/581 cgg aac ggc ttc arg aan gly pae	arg step see see see see see see see see see s	tre phe cor ser ser cor cor cor cor cor cor cor cor cor co	met atc ile ttq cag gar gar tcq cac gar cac cac cac cac cac cac cac cac cac c	ile ggt cag gla cag gan gan cag gan cag gan cag gan	acc acc groces care care care care care care care care	data data data data data data data data	### thr 1351/45 tac dtg tyr val 1411/47 gog good ### 1621/51 ### 600 1831/51 ### 600 ### 1651/55 ### 600 ### 1751/55 thr chr 1751/55 the sid 1771/59 gac tac	leu	phe sac san cac his cat gas giv asg lys ser sac thr	ann quo val quo val acc thi acc asn iya cca pro quo ais	leu asg iys ang thr too asr qat asp org ala ass tys chr ctg	acc thi ricc phe gac his cog glu gat and cttg	asa lys gra yal atq gas cag gin cag gin	leu gac anp sco thr sag lys gcc ala sca thr ctc leu acc acc	asn cro lsu gra yai gog ala cag gin gra yai yai yai yai xag xai
mer ser lew lew 1321/481 aac gtr gte aac asn val val asn 1381/461 gtc gaa ctc ggt val glw law gly 1841/481 ctt ttc acc gcc lew phe thr als 1561/521 cgt ctg gcc aac agg lew thr asn glw 1621/541 ctg acc aac gag lew thr asn glw 1681/561 cag gtc tct aac gln val asr asn 1741/581 cgg aac ggc tcc arg aan gly phe 1861/661	arg	ser cre phe cor esp atile epr cre cre cre cre cre cre cre cre cre cr	met atc ile ttg ceg gac esp tcg sec cac his gg; atg men	ile ggt cag gin cag gin cag gin cag gin	sar sar cat his ggr gly gat sap ccg pro cag gin ccc gin ccc gr pro	div div div div div div div div div div	### thr 1351/45 tac dtg tyr val 1411/47 gog doo ### ala 1471/40 gag doo 1831/51 ctg coc 1831/51 ctg coc 1831/53 ### coc 1831/53 ### coc 1831/53 ### coc 1831/53 thr chr 1711/87 ttg goo 1831/61 #### doo #### doo ###################################	leu	phe sac san cac his cot gas giv asg lys ser thr and tag tag tag ser thr	ann quo val quo val acc thi aac asn iya cca pro qcc ala tcgg	lau asq lys acq the toc see que assp que ala assc the ctq leu	acc three gac gac his gac gac gac gac gac gac gac gac gac and gac gac and gac	arq ass lys gra gra asc asc gra	see anp see thr sag lys ger als see thr ctc leu acc thr	asn Ctq Isu Gts God ala Cag Gty Gty Val Asg Asg Val Asg Val Asg Asg Val Asg Val Asg Val Asg Val Asg Val Asg Val Asg Val Asg Val Asg Val Asg Val Asg Val Asg Val Asg Asg Val Asg Val Asg Val Asg Asg Val Asg Val Asg Val Asg Val Asg Val Asg Val Asg Val Asg Val Asg Val Asg Val Asg Val Asg Asg Val Asg Val Asg Val Asg Asg Val Asg Asg As Asg Asg As Asg Asg As Asg Asg
max ser lew lew 1321/481 aac gto gto aac aan val val aan 1381/461 gto gaa cto ggt val glw lew gly lest/481 cog acc ggt ata pro the giy ile 1501/501 ctt tto acc gco lew phe the als 1561/521 cgt ctg ggc aac arg lew gly asn 1621/541 ctg acc aac gag lew the asn glw 1581/561 cag gto tot aac gln val aan glw 1741/561 cgg aac ggc tto arg aan gly phe 1801/601 gtg tte tte tcc gtg tte tte tcg	arg	ser created and control of the contr	met atc ile ttg ceg gen gen tcg en tcg gen tcg en tcac en	ile ggt cag gin	acc son cat his ggr gat assp ccg gin ccc sia ccc gro ccc sia ccc ccc cap ccc ccap ccc cap ccc ccc	thx ago	map thr 1351/45 tac gray tyr val 1411/47 gag gec ala ala 1471/49 gag coc giu pro 1831/51 tac gac thr thr 1711/87 tac gac tac gac thr thr 1711/87 tac gac	leu	phe sac cac his cot gas giv asg lys cot to the sat to t	ann que val que ann ann ann ann ann ann ann ann ann an	leu asg lys acg the toc ser gat assp gcg ala lys ctg leu gcc	acc three tree gas asp cas his asp gar asp gar asp gar asp cas asp gar asp cas asp asp asp asp asp asp asp asp asp a	arq ass lys gra gra asc asc cag gin cag gin cag gin ttc	leu gac anp sco thr sag lyo gcc ala aca thr ctc leu acc thr	asn Crown con con con con con con con con con co
mer ser lew lew 1321/481 aac gto gto aac aan val val aan 1381/461 gto gaa cto ggt val glw lew gly lest/461 cog acc ggt ata pro thr giy ile 1501/501 ctr tto acc gco lew ghe thr als 1561/521 cgt ctg ggc aac gag lew thr asn glw 1621/561 cag gto tot aac gin val aar aan 1741/561 cgg aac ggc tto gin val aar gly pre 1501/601 gtg tto tto tcg val phe phe see	arg	ser created and control of the contr	met atc ile ttg ceg gen gen tcg en tcg gen tcg en tcac en	ile ggt rag gln asc ssn cag gin cag gin cag gin cag gin cag gin cag gin	acc son cat his ggr gat assp ccg gin ccc sin c	thx ago	### thr 1351/45 tac dtg tyr val 1411/47 gog doo ### pro ### pro 1831/51 ctg coc 1831/53 ctg coc thr thr 1711/87 ttg gcc teu ele 1771/89 gac tac ###################################	lew learning to the control of the c	phe sac cac his cot gas giv asg lys cot to the sat to t	ann que val que ann ann ann ann ann ann ann ann ann an	leu asg lys acg the too see gat assp gag ala asa lys acc the ctg leu gcc	acc three tree gas asp cas his asp gar asp gar asp gar asp cas asp gar asp cas asp asp asp asp asp asp asp asp asp a	arq ass lys gra gra asc asc cag gin cag gin cag gin ttc	leu gac anp sco thr sag lyo gcc ala aca thr ctc leu acc thr	asn Crown con con con con con con con con con co
ser ser lew lew 1321/481 aac gto gto aac aan val val aan 1381/461 gto gaa cto ggt val glw lew gly lest/461 cog acc ggt ata gro the giy ile 1501/501 ctt tto acc gco lew phe the als 1561/521 cgt ctg ggo aac arg lew the as glw lew the aac gag lew the aac gag lew the aac gag lew the aac glo val see acc arg aan gly gan 1741/561 cag gto tot aac gln val see arg aan gly phe 1501/601 gty ttt tte too val phe phe see 1851/621	arg atg atg asg cos ass acc acc acc acc acc acc acc acc ac	tree phe cor sar sar sar sar sar sar sar sar sar sa	met atc ile ttg ceg gen gen tcg en tcg gen tcg en an gen an gen an an an	ile dit cag gin cag gin cag gin cag gin cag gin cag gin	acc	thr ago ser gary gary gary gary gary gary gary gar	### the 1351/45 tac gray tye value of a 1411/47 gray cook also acceptable of the cook accep	leu i got asp syry tury tory tory tory tory cory tory cory i ecc thr cory i ecc thr i	phe sac san cac his cot arg gis as gis as cot three sat grant gran	ann que val ecc ann ann ecc an	leu asg lys acg thr toc ser gst assp gcg ala scc thr ctg leu gcc sla	acc three cac phe cac his cag group cac his cac group ca	arq ass lys gra gra val arq gra cag gr	less gac anp sco thr sag lys gcc als scs thr cec ies sco thr ggc gr yly	asn cap cap cap cap cap cap cap cap cap cap
mer ser lew lew 1321/481 aac gto gto aac aan val val aan 1381/461 gto gaa cto ggt val glw lew gly lest/461 cog acc ggt ata pro thr giy ile 1501/501 ctr tto acc gco lew ghe thr als 1561/521 cgt ctg ggc aac gag lew thr asn glw 1621/561 cag gto tot aac gin val aar aan 1741/561 cgg aac ggc tto gin val aar gly pre 1501/601 gtg tto tto tcg val phe phe see	arg stg ser ogs arg arc res arg arc arg arc	tte phe test par test	met atc ile ttg leu cag gar gar cac his cgr gr atg	ile dgt cag gac cag gin cag gin cag gin gac cag gin cag gin gac cag gin cag gin gac cag gin	acc	thr ago	### the ### th	les i gan asp ssp i gan ssp i gag tog tog tog tog tog tog tog	pho suc car car car car car car car car car ca	ann que val que val ace ase iya cea pre que als tog que ata	leu asg lys acg thr toc ser gst assp gcg als scc thr ctg leu gcc als	ser	assa lys assa lys assa assa assa cag gin acc aca gin acc aca gin acc aca acc acc acc acc acc acc acc ac	less sec sap sec sap sec sac sec sac sec sec sec sec sec sec sec sec sec se	asn cap cap asn cap as

SEQ ID N° 32D (suite 1)

FEUILLE DE REMPLACEMENT (REGLE 26)

met leu val een ile pro ala ser arg glu arg val vel ele val ser phe pro arg asp

SEQ ID N° 32F

```
2041/681
acc acc tgc gag tag
thr thr cys glu AMB
                              SEQ ID N° 32D (suite 2)
                               FIGURE 32D (suite 2)
ORF d'après Cole et al. (Nature 393:537-544) et connenent 800822c
2 62
tag gae ang agt gae gge gag age get geg beg tog gea egg etc toe gag toa gea the
AMB asp met ser asp gly glu ser ala ala pro trp ala arg leu ser glu ser ala phe
63 /33
                                        25/32
eco gat got git gan oga igg ate ang gia ong on gen ana igg gig gna yen can ggi
pro sap gly val asp ard trp ile the val pro pro als the trp val als ale glo gly
121/41
                                        151/51
eed eed dae ace cad aar dre dee tde car dee ace dee dee dre at dre dee dat erd
pro any amp the gin asn wal gly sys his als the gly als val ser wal als asp lea
181/61
                                        211/71
ate que agg etc que coe que tet ect que etc coe aeg eus epe eus gee que coe qua
ile ala arg leu gly pro ala phe pro asp leg pro thr hiz arg his val ala pro glu
                                        271/91
con dad cos too dde ode dda cod aad dro can dae dae dee dae cad cad dae ace
pro glu pro ser gly arg gly pro lys val his sap asp als asp asp gin gln asp thr
2017101
                                        331/111
gay got ale goe are dog god can beginde gay the oth tog gay off odd gan oth ogg
glu ala ile ala ile pro ala his ser leu glu phe leu ser glu leu pro asp leu arq
383/321
                                         391/131
des dec sec fat and the dec dec dec dec an dec at des are dec ded are dec dec dec sed
ala ala ann tyr pro arg ala asp his ala arg arg glu pro glu leu pro gly lya gln
421/141
                                        451/151
ota acc ggs tog got ogs gtg ogg cos tig ogg ato ogg ogs sog tog occ gog occ god
lou the Gly ser ala ard val ard pro leu ard the ard and the ser pro ala pro ala
3.3 3 / 3 8 3
                                        $11/171
and con and con was too also odd odd ood nid ath oth doe dod odd tod ond dod and
lys pro als pro asn sor gly are are pro met val leu als als are ser leu als als
541/181
                                        371/191
ety tot god got oty gog tig gog oty are gge ggy gea tog can tog age geg tog aag
ieu phe ala ala lou ala lou ala leu thr gly gly ala trp gln trp ser ala sor lys
$00./201
ase age egg etg ase atg gis age geg etc gas eeg est tog gge gat att gtc ase eec
ash ser and les ash met wal ser ala les asp pro his sen gly asp ile wal ash pro
881/221
                                        891/231
age agg can cat upe has don one the this one has day and see our out doe doe dee
ser gly gln his gly asp glu asn phe low lew val gly met asp ser and sla gly ala
723/243
                                         751/251
ase goe sat ate gue goe age gas goe gag gas goe goe goe goe goe set tog gae ace gto
asm als som the gly ala gly asp ala glu asp ala gly gly ala are see sop the wal
781/281
                                        811/271
aty off yto sac att deg you ago ogo yay ogy yto yto yoy yty toy the oce eyo yao
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100/185

1981/681

2011/671

the age god gtg ego got one oty ong agt gge too and gte age gtg cag ata age ego phe ser ala val ang ala pro lew pro sen gly sen the val sen val gin ile sen and

and the the ago con bed acc may oth one gay gan ety and dre acc and dee dee dae and ser ser not bro pro the lys law pro giv may law the val the ann als als may

1981/661

101/185

941/281				NOTE STATE					
cid dod spe ser	ರಾಣಕ ಕಾರಣ	maa hoom	constant arrange	871/291 : too ass	managan ayasa				
leu sla ile thr 901/301	pro ile	gln cys	din els	trp ass pro 931/311	gay acc	. djà jà . dår ««	a tht d rec	dia b	30 CC
are tac gas gag	880 800	aga aca	ata mat	- PARIARA - DOD ANA MEN	ata tas	- decompos premi	01 Y N N N	0.000 20	
ile tyr asp glu 961/331	lys thr	gly thr	met gly	pro arg les 991/331	val tys	, the dr	y acc	lys l	45E
aac tog goa tto	too ote	dåc dåd	out saç	tgt cta gtg	sag gto	att ca	C 888	ota te	22
1021/341	ner hus	ara ara	pro lys	- cys leu vsl - 1051/351	lys val	ile gi	n lys	Jen a	47.0
ggo ttg ago ato	war caa	tto atc	guş stt	gad the gro	ggt the	. ಡೆಪಡೆ. ಪಡೆ	g atg	gto g	3.9
1081/381 dra ren set fræ	san arg	pos lle	ala ile	**************************************	aja bye	ala ar	3 met	wai gi	1.13
ged etc gge gge	arc ded	gra ege	897 800	acc ccy ttg	add dac	tac ga	a ctg	ggc as	ಐಡ
ala leu gly gly 1141/351				1171/391					
gtg ctg gag cac	23 2 45 10 200 334	- කත්ත කැන - කත්ත කම්ම	grow arr	dac ddd cod	୍କଦର ସୁଅଧି	ctg as	c sat	ತ್ರಿಪ್ಪಡೆ ಈ	3.0
val leu glu his 1201/401				1231/411			•		
get ege eag gte ala arg gin val	the the	യുകളെ കളവ ത്രീയ തക്ക	୍ୟାଷ୍ଟ ପୃସ୍ତ ବ୍ୟବସ୍ଥ	gac tas ggg	000 800	. AAA OG	o dag	mag to	ÇĢ
1261/421 ttt ttg tog tog				1291/031					
phe leu ser ser	led les	are ser	- 1865 11 6 - 1865 11 6	- sog ang gag	-800 009 -865 189	555 84 250 00	0 000	890 80	33
1321/441 ccc asc sac gtc				1351/451					-
ieu aon asn vai	Val ass	met she	ile oly	was ago sec	And and	. කතන වන මෙක්ට කුඩ	ର ବ୍ୟସ୍ଥ ୪ ୪୦୦୫	-800 &3 -200 - 12	38.26 > x x x
1381/461 gad otg gto gaa				1911/67)					
asp leu val glu	leu gly	320 301	leu ala	yey gos sac ala dem mid.	ala ala	: Sac go	කෙක්ක ව වූවක	200 gr	হয় ভেস
1441/481 acc gtt cog acc				2871/491					
the val pro the	gly ile	thr asp	aln asn	gy≃ yac gay div aso gin	STATE STATE	i waa ah	6 888 8 888	් ජීනව නැ	£Ø.
1501/501				1531/511				-	
asy gog out the lys als low phe	thr ale	ile ile	- 820 521 - 820 520	- gar seg etg	200 000	୍ଷ୍ଟର ୧୯	a dat	080 80	30
1201121				1891/831					
gec cag egt etg ala glm arg leu	പുദ്ധം അവ	- 900 000 - 900 000	2008 8000	- CCG CCG SCC	300 acc	. 993. 98	द्वे वेदवे	ದರಣೆ ಕ	કે.ફે
1621/541				1681/881		-		-	
gog ggt otg acc ala gly lew thr	***** ********************************	- 800 089 - 314 - 415	080 080	cas att sog	acg acc	. pod co	& &&&	និងនៃ និរុ	to
1681/561				1711/671					
aca gtg cag gtc the val gin val	2000 322 444 444	200 800 200 800	- ඉතුල සමද - ක්ෂා ක්ෂා	gaa gat tta	god acc	800 00	ದ ಇದರ	382 C	&g
17417581				1771/691					
otc aag ogg aso	ತಿಹಿದ ಬರಣ	asc grg	983 SQ1	රසයි සිතර ජීතර	ps:0.000	agt to	à ctà	ದ್ವರ ರೊ	ØØ.
leu lys arg asn 1801/601				1831/611					
acc aca gtg tit	The bog	coo gao	8.8C Q3.8	. cag got god	900 800	i apa 8c	ರ ತಾಲಲ	gty t	ÿ.XI
the the val pha 1881/621				1891/631					
ggs sag toa aag	ක්ෂිට සුන්සු ප්රකාශ	ogg gtg	see ggg	asc gga caa	cty gio	tag gt	à àsà	org gr	30
gly gln ser lys				1931/681					
cas gad btd agd	ged ged	oga gat	god otg	cca ear dac	TOO SOC	aro ag	೦ ಇಸ್ಥ	cag a	Ŕ.Ż.
- SAR 998 VIII 252	ala vai	वद्य अस्थ	510 761	pro ser gly 2011/671					
1981/661	44.000								
1981/661 ago ogo aac toc	too wyo	00% 000	800 880	cra con gag	980 085	r eog gt	c acc	aas ş	:0¢
1981/661 - ago ogo aac toc - par azg asc ser - 2041/681	ser ser	bio bio	acc ass thr lys	len bio din	gao otç asp les	the ya	c ace i the	sac ç san s.	ia La
- 1981/661 - 890 090 880 too - 980 809 880	pao dad ser ser	tag tag	acc esq thr ly:	gen bio din est con dad	gao etç asp led	r acg gt Lithe va	o acc i the	sac ç san a	ia La

SEQ ID 32F (suite 1)

102/185

2/1 31/11 COT CAC CIC TOC CAT GG? CCA TCT ACG GTA TCT GGG ACA AGG GCA GCG TCG ATC CCT CGA arg his lew dys his gly pro ser thr val ser ala the arg ala als ser ile pro arg 61/21\$1/31 CAT GCA GAG TOG GTG TTC GCT TCA CGC GAA CTA GGC GCG CCT AGC CTG GAC GAG TCC CCG bis sin giv ser vel phe ala ser arg glu leu gly als pro ser leu asp glu ser pro 121/41 151/51 GGC CGA CAT TOU COO GAG GCC TTG GCC TCC ATC ACC TAA TTG TOT GCA AAA COG TAT CTA gly arg his ser pro glu ala leu ala ser ile thr OCS leu cys ala lys pro tyr leu 181/61 211/71 ATT GAT ACG ATT GCG CAC ATG GCT ATC TGG GAT C ile asp thr ile ala his met ala ile trp asp

SEQ ID N° 33A

FIGURE 33A

1/1

GTC ACC TCT SCC ATS GTC CAT CTA CGG TAT CTG CGA CAA GGG CAG CGT CGA TCC CTC GAC val thr ser ale met val his lew arg tyr lew arg gin gly gin arg arg ser lew asp 61/21

ATG CAG AGT CGG TGT TCG CTT CAC GCG AAC TAG GCG CGC CTA GCC TGG ACG AGT CCC CGG met gin ser arg cys ser lew his ale aen AMB ale arg lew ale trp thr ser pro arg 121/41

GCC GAC ATT CGC CCG AGG CCT TGG CCT CCA TCA CCT AAT TOT GTG CAA AAC CGT ATC TAA ale asp ile arg pro arg pro trp pro pro ser pro asn cys val gln asn arg ile och 161/61

TTG ATA CGA TTG CGC ACA TGG CTA TCT GGG ATC
lew ile arg lew acg thr trp lew ser gly ile

SEQ ID N° 338

FIGURE 338

SEQ ID M' 33C

103/185

```
séquence Rv1844 prédite par Cole et al. (Nature 393:537-544) et contenant seglia
                                         31/11
ting thin has ass don thit ath att her ach all hop can all hot atd ind hat one of att
leu cys ala lys pro tyr leu ile asp thr ile ala his met ala ile trp asp arg leu
61/21
                                         91/31
gic gag git you goo gag caa cat ggo tao gto aog act ogo gat gog oga gad ato ggo
val glo vel ala ala glo gln his gly tyr val the the arg asp ala arg asp ile gly
                                        151/51
gto gas out gtg cag the ego oto tha gog ggg ogo gga ogt ott gag ogt gto ggo ega
val asp pro val gin lew arg law lew ala gly arg gly arg lew glw arg val gly arg
181/61
                                         233/73
gat and two oga and occ and one ood out alt day out day out day and one dos acc acc acc
gly wal tyr arg wal pro wal leu pro arg gly glo his asp asp leu ala ala ala wal
241/81
                                         271/91
teg tog act the gog out got git ato tog cat yay tog got the gog oth can got the
ser trp thr law gly arg gly val ile ser his gly ser als lew als law his als lew
301/101
                                        331/111
got gad gtg ase dog tog ogo atd dat ott son gid oog ogd aad aad dat oog ogt gog
als asp val asn pro ser ary ile his led thr val pro ary asn asn his pro ary alo
361/121
                                        391/131
god ggg ggc gag dig tad oga gtt dad ogd ogt gad etd dag god god dad gtd act tog
ala gly gly glu leu tyr arg val his arg arg arp leu gln ala ala his val thr sor
421/141
                                        451/151
gto gan gga ata one gto and and gtt god ogn and att ass gan age gtd asg ang gge
val asp gly ile pro val thr thr val ale arm thr ile lys asp cya val lys thr gly
481/161
acy yat out tat cay off ogg goe yey ato gay ogs you yas you gay yet acy off egt
thr asp pro tyr gin lew arg ala als ile glu arg ala glu ala glu gly thr lew arg
                                         571/191
cat gag toa gas got gag sta sgo got gag sto gat gag act act got ggs tta ogt get
ard gly ser als sis glu leu ard sis sis leu sup glo the the sis gly leu ard als
601/201
ogg oog aag oga goa tog gog tga
arg pro lys arg ala ser ala OPA
```

SEQ ID N° 33D

FIGURE 33D

104/185

ORF d'aprés Cole et al. (Nature 393:537-544) et contenant Rv1944

```
1/1
taa tig igi goa aaa oog tat eta att gat aog att gog oac atg got atc igg gat ege
OCH led dys als lys pro tyr led ile asp thr ile als his met als ils trp asp arg
61/21
                                        $1/31
cto qto qaq qtt goo goo gag caa cat ggo tac qto acg act ogo gat gog oga gac ato
leu val glu val ala ala glu gln his gly tyr val the the arg asp ala arg asp ile
                                        151/51
age gto gas out gtg cag clo oge etc eta gog ggg oge gga ogt ett gag ogt gte gge
gly val asp pro val gin les ang les les ala gly ang gly ang les gle ang val gly
181/61
                                        211/71
ega ggt gtg tae egg gtg eee gtg etg eeg egt ggt gag eae gae gat ete gea gee gea
ard diy val tyr ard vol pro val leu pro ard diy din his asp asp led ala ala ala
241/81
                                        271/91
gtg tog tog act ttg ggg ogt ggc gtt ato tog cat gag tog goo ttg gog ett eat goo
val ser try thr law gly arg gly val ils ser his glu ser ala lew ala lew his als
301/101
                                        331/111
one got gan gig ase ong ing ogn ato hat the son gin ong ogn san ase hat ong ogn
leu ala asp val ash pro ser arg ile his lev thr val pro arg ash ash his pro arg
361/121
                                        391/131
gog god ggg ggc gag etg tad ega gtt car ege ege gar etc cag gca gcc car gtt act
als als gly gly giu leu tyr arg val his arg arg asp leu gln als als his val thr
                                        451/151
tog gto gan gga ata oon gto ang ang gtt gog ogn ann ato aas gan tgo gtg asg ang
ser wal asp gly ile pro wal thr thr wal ala arg the ile lys asp cys wal lys the
                                        511/171
gar acq gat cot tat cay off egg god god ato gag ogs god gas god gag ggd sog off
gly the asp pro tyr gln leu arg ala ala ilo glu arg als glu ala glu gly the leu
541/181
                                      . 571/191
egt egt gag tea gea get gag eta ege get geg ete gat gag ace act gee gga tha ege
arg arg gly ser ala ale glu low arg ala ale lon asp glu thr thr ala gly low arg
601/201
got ogg oog sag ogs gos tog gog tga
ala ang pro lys ang ala sen ala OFA
```

SEQ ID N° 33F

FIGURE 33F

```
1/1
ATC CAA COT GCT GGG CCT GCG CCT TCG AAT CGA CGG CCA GGC CAC CGC TCG CTG CCG GCA ile gin pro ale gly pro ale pro ser sen arg arg pro gly his arg ser leu pro ale 61/21

ACA ACA CCT GGA ATG GGG ACC TTT TCG GTG TTG CTG OTA ACC GGG ACA ACC GGC ACC ACG br thc pro gly met gly the phe ser vel leu leo val the gly the the gly the the 121/41

CCT CGG TCG AGA CGT ATC GCG GCA GCG TTG GCC CTG TCG TTG CTG ACA ATT ACC GCT GGC pro arg ser arg arg ile ale ale ale leo ale leo ser leo leo the ile the ale gly 181/51

CGC CGC ATA TTT GCC GCG CCG CGG GCC GGA TC

arg arg ile phe ale ale leo pro arg ale gly
```

SEQ ID N° 34A

105/105

1/1

TCC AAC CTG CTG GGC CTG CGC CTT CGA ATC GAC GGC CAG GCC ACC GCT CGC TGC CGG CAA ser asn leu leu gly leu arg leu arg ile asp gly gln als thr als arg cys arg gln 61/21

CAA CAC CTG GAA TGG GGA CCT TTT CGG TGT TGC TGG TAA CCG GGA CAA CCG GCA CCA CGC gis his leu glu trp gly pro phe arg cys cys trp OCH pro gly gln pro als pro arg 121/41

CTC GGT CGA GAC GTA TCG CGG CAG CGT TGG CCC TGT CGT TGC TGA CAA TTA CCG CTG GCC leu gly arg asp val ser arg gln arg trp pro cys arg cys OPA gln leu pro leu als 181/51

GCC GCA TAT TTG CCG CGC TGC CGC GGG CCG GAT C
ala ala tyr leu pro arg cys arg gly pro asp

SEQ ID N° 34B

FIGURE 34B

1/1									31/11								
GAT CCA	ACC	TGC	TGG	GCC	TGC	CCC	TTO	GAA	TCG ACG	900	AGG	CCA	ccs	crc	cor	GCC	ggg
asp pro	thr	cys	tep	ala	cys	ala	phe	glů	ser thr	81.8	arg	pro	oro	Leu	ala	ala	elv
61/21									91/31								
AAC AAC	ACC	TGG	AAT	200	CAC	CTT	TTC	ggr	GTT GCT	GGT	AAC	COQ	GAC	AAC	ccc	CAC	CAC
885 885	thr	txb	ឧទន	åĩX	នានេស្ត	len	pha	gly	Val ala	919	233	arg	asp	asn	38.03	his	his
121/41									151/51						•		
GCC TCG	GTC	GAG	ACG	TAT	CGC	990	AGC	\mathtt{GTT}	sec cor	GTC	GTT	SCT	CAC	AAT	TAC	202	TGG
ala ser	væl	glu.	thr	232	423	gly	ser	72.Y	gly pro	val	važ.	ala	asp.	asn	£VX	823	tro
181/61									211/71								
									CGG ATC								
bro bro	hâs	ilm	cys	arg	ala	a.l.a	als	gly	arg ile								

SEQ ID N° 34C

FIGURE 34C

106/185

ORF d'aptès Cole et al. (Nature 383:537-544) contennant seg34A

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1/1
tad oog cag ggc cot gog get agg cgc ggc ogg tgc cgt tgg cog cgg cgg caa teg atg
AMB pro gin gly pro ala ala arg arg gly arg bys arg trp pro arg arg gln ser met
                                        91/31
tha cas cas the cas ope cas and say the say ogo are give say the sat cas one spe
leu gin gin leu gin arg gin met glu ser giu arg ile val glu phe asp gin leu gly
                                        151/61
agg gga gas git gog cag oga ogg ato caa cet got ggg oot gog cet tog aat oga ogg
arg gly asp val ala gln arg arg ile gln pro ala gly pro ala pro ser ash arg arg
                                        211/71
cea ggo cae ego tog otg oog gea aca aca oot gga atg ggg acc set tog gtg teg etg
pro gly his arg ser leu pro ala thr thr pro gly met gly thr phe ser val leu leu
241/81
                                        271/91
qta acc 999 aca act 99c acc acq oct egg tog aga egt atc geg goa geg ttg geo etg
val thr gly thr thr gly the the pro arg ser arg arg ile ala ala ala leu ala leu
                                        331/111
tog tig olg aca att acc got ggs ogo ogo ata til geo gog olg cog ogg geo gga tog
ser led led thr ile thr ala gly arg arg ile phe als als led pro arg ala gly ser
                                        391/131
agg tog are tgo cag ato toa cog ogo ago ato tae goo git ogo tgo aaa cog oog act
arg ser the eys gin ile ser pro arg ser ile tyr ale val arg eys lys pro pro the
                                        451/151
gog acq goa ggc coa cic tot tgg cat gog too aat get geg acg too tog gia gad aaq
als the als gly pro low ser trp his als ser as als als the ser ser val asp lys
481/161
                                        511/171
ete acq off ggo the atg may cay the tac ona tot age acc aga tag
led the led gly phe met pro gln ser tyr pro cys ser ash and AMB
```

SEO ID N° 34F

FIGURE 34F

```
31/11
CAG TOT GTC GGC AAG GAG GGA CGC ATG CCA CTC TOC GAT CAT GAG CAG CGG ATG CTT GAC
gin ser val gly lys glu gly arg met pro leu sor asp his glu gin arg met leu asp
61/21
                                        91/31
CAS ATC GAG AGC GCT CTC TAC GCC GAA GAT CCC AAG TTC GCA TCG AGT GTC CGT GGC GCG
gin ile glu ser ele leu tyr ala glu asp pro lys phe ala ser ser val arg gly gly
                                        151/51
GGC TTC CGC GCA CCG ACC GCG CGG CGG CGC CTG CAG GGC GCG GCG TTG TTC ATC ATC GGT
gly phe arg ala pro the ala arg arg arg les gin gly ala ala les phe ile ile gly
                                        231/71
CTG GGG ATG TTG GTT TCC GGC GTG GCG TTC AAA GAG ACC ATG ATC GGA AGT TTC CCG ATA
led gly met led val ser gly val ala phe lys gld the met ile gly ser phe pro ile
241/81
                                        271/91
CTC AGC GFF TTC GGT TTT GTC GTG ATG TTC GGT GGT GTG GTG TAT GCC ATC ACC GGT CCT
led ser val phe gly phe val val met phe gly gly val val tyr ala ile thr gly pro
                                        331/111
COS TTG TOO GOO AGG ATG GAT COT GOO GGA TOG GOT GOT GGG GOT TOG CGC CAG COT COT
ard lev ser gly and mot asp and gly gly sen als als gly als sen and glo and and
361/121
                                        391/131
ACC AAG GGG GCC GGG GGC TCA TTC ACC AGC CGT ATG GAA GAT C
thr lys gly ala gly gly ser phe thr ser arg met glu asp
```

SEQ ID N° 35A

107/185

1/1 31/11 GAC AGT CTG TOG GCA AGG AGG GAC GCA TGC CAC TCT OUG ATC ATG AGC AGC GGA TGC TTG asp ser lew ser ala arg arg asp ala cys his ser pro ile met ser ser gly cys lew 61/21 91/31 acc aga tog aga gog oto tot acg cog aag att coa agt tog cat oga gtg too gtg gog thr arg ser arg ala lew ser thr pro lys ile pro ser ser his arg val ser val ala 151/51 GGG GCT TOO GCG CAC CGA COG CGC GGC GGC GCC TOO AGG GCG CGG CGT TGT TCA TCA TCG gly als ser als his ard pro ard gly gly als cys ard als ard ard cys ser ser ser 181/61 211/71 GTC TGG GGA TGT TGG TTT CCG GCG TGG CGT TCA AAG AGA CCA TGA TCG GAA GTT TCC CGA val trp gly cys trp phe pro ala trp arg ser lys arg pro OPA ser glu val ser arg 271/91 TAC TCA GCG TIT TCG GIT TTG TCG TGA TGT TCG GTG GTG TGG TGT ATG CCA TCA CCG GTC tyr ser als phe ser val led ser OPA dys ser val val trp dys met pro ser pro val 301/101 331/111 CTC GGT TGT CCG GCA GGA TGG ATC GTG GCG GAT CGG CTG CTG GGG CTT CGC GCC AGC CTC leu gly mys pro ala gly trp ile val ala asp arg leu leu gly leu arg ala ser val 361/121 391/131 GTA CCA AGG GGG CCG GGG GCT CAT TCA CCA GGC GTA TGG AAG ATC wal pro ard gly pro gly ala his ser pro als wal trp lys ile

SEQ ID N° 358

FIGURE 358

31/11 ACA GTC TGT CGG CAA GGA GGG ACG CAT GCC ACT CTC CCA TCA TGA GCA GCG GAT GCT TGA thr val cys and gin gly gly the bis bla the less and see OPA als als asp bla OPA 91/31 CCA GAT CGA GAG CGC TOT CTA CGC CGA AGA TOC CAA GTT CGC ATC GAG TGT CCG TGG CGG pro asp and giv and sen lev and and and sen din wal and the glv cys pro one and 151/51 666 CTT CCG CGC ACC GAC CGC GCG GCG GCG CCT GCA GGG CGC GCC GTT GTT CAT CAT CGG gly let pro and the asplace ale ale ale pro ale gly and gly val wal his his and 211/71 TOT GGG GAT GTT GGT TTC CGG CGT GGC GTT CAA AGA GAC CAT GAT CGG AAG TTT CCC GAT ser gly asp val gly phe ard ord gly val gln ard asp his asp ard lys phe pro asp 241/81 271/91 ACT CAG COT THE CGG THE TOT COT GAT GET CGG TOG TOT GGT GTA TGC CAT CAC CGG TCC the gin arg the arg the eye arg ast valued tro eye gly val eye his his arg sec 331/111 TOG STT STC COS CAG SAT GGA TOG TOG COS ATO GGC TOC TOG GGC TTC GCG CCA GUG TOG ser val val and gin amp gly ser trp and the gly dys trp gly phe ala pro ala ser 361/121 391/131 TAC CAA GOO GOO COO GOO CTC ATT CAC CAG CCG TAT GGA AGA TC tyr gin gly gly arg gly les ile his gin pro cyr gly arg

SEO ID N° 350

108/185

séquence Rv2169c prédite par Cole et al. (Nature 393:537-546) et contenant partiellement seq35A

```
1/1
                                        31/11
atg cos oto too gat cat gag cog ogg atg ott gao cag ate gag ago got oto tao goo.
Met pro leu ser asp his glu gln arg met leu asp gln ile glu ser ala leu tyr ala
                                        91/31
gas gat occ asy the ges tog age gto egt ggo ggg ggc the ege ges eeg ace geg egg
glu asp pro lys phe als ser ser val arg gly gly gly phe arg als pro thr als arg
                                        151/51
ogg ego etg eag gge geg geg tig tre ate ate ggt erg ggg atg try gtt tee gge grg
arg arg leu gin gly ala ala leu phe ile ile gly leu gly met leu val ser gly val
                                        211/71
gog the aas gag ace and ate ggs agn the dog are the agn gut the ggt but ghe ghg
als phe lys glu the met ile gly ser phe pro ile les ser val phe gly phe val val
243/81
                                        271/91
atg the ggt ggt gtg gtg tat get atc acc ggt cot egg the toe ggc agg atg gat egg
met phe gly gly val val tyr als ile thr gly pro arg led ser gly arg met asp arg
301/101
                                        331/111
ggo ggs tog got got ggg got tog ogs cag ogt ogt soc sag ggg god ggg ggd toa tto
gly gly ser als als gly als ser arg gln arg arg thr lys gly als gly gly ser phe
                                        391/131
ace ago ogt and gas gat ogg the ogg ogs oge the gas gag tax
thr ser and met glu asp and phe and and and phe asp glo och
```

SEQ ID N° 35D

FIGURE 35D

ORF d'après Cole et al. (Mature 393:537-544) et contecnant Av2169c

```
31/11
tga cag tot gio ggo aag gag gga ogo atg coa ooc too gat cat gag cag ogg atg oot
OPA gin ser val gly lys glu gly arg met pro leu ser asp his glu gin arg met leu
                                        91/31
dan dag ato gag ago got oto tao god gam gat oco mag tho god tog agt gto ogt ggo
asp gin ile giu ser ala leu tyr ele giu asp pro lys phe dia ser ser val arg gly
121/41
                                        151/51
and and the ede dem eed wee ded edd edd ede end ewa dde ded ded ted the who who
gly gly phe arg als pro thr ala arg arg arg leu gln gly ala ala leu phe ila ile
381/61
                                        211/71
age ctg and atg tig att too age and and the asa and acc atg atc age agt the cod
gly law gly met len val ser gly val ala phe lys glu the met ile gly ser phe pro
241/81
                                        271/91
ata oto ago git the ggt tit gid gig atg the ggt ggt gtg gtg tat goo ato ace ggt
ile lou ser vel phe gly phe val val met phe gly gly val val tyr ale the thr gly
301/101
                                        331/111
out mgg tig too ggs agg atg gat ogt ggs gga tog got get ggg got tog ogs cag ogt
pro arg les ser gly arg met asp arg gly gly ser ala ala gly als ser arg gln arg
361/121
                                        391/131
out acc and god god gog god tow the acc age out and gas gat ogg the egg ege ege
ard the lys gly als gly gly ser phe the see and met glu sop and phe ard and
421/141
tto gad gag tas
phe asp glu OCH
```

SEQ ID 35F

109/185

111 31/11 GAC CTG GGA CGA AGA CGA CGG CAG CAG CCG CAA TCA GAI CTA CCC GGT CCT GGT CAA CGT asp len gly ang ang ang ang gin gin pro gly sen asp len pro gly pro gly gin ang 61/21 91/31 CAA TOG ACA CCC GAC TAC GOT GCG CCT GCG CGG CTC GAC AAT GCG CGG TTC CTG TTG CCC gin trp thr pro asp tyr gly ala pro ala arg leu asp asn ala arg phe leu leu pro 151/51 OTG GTC GGA GTG CCA CCC GAC CAG GCC ACC GAC TTC GGC TCC GCT GTT GCA CCA GAA ACG val val gly vel pro pro asp gin ala thr asp phe gly ser ala val ala pro glu thr 181/61 211/71 ACG GCG CCG GTC TGG ATC ACC ATG CTG TGG CCG CTG GCC GAC CGG CCC CGG TTG GCC CCC the als pro vel trp ile the met led trp pro led als sep and pro and led als pro 271/91 GGG GCA CCC GGT GGC ACC GTT CCC GTC CGG CTG GTC GAC GAC GAC CTG GCA AAC TCG CTG gly als pro gly gly the vai pro val arg ieu val asp asp asp leu ala ase ser leu 301/101 331/111 GCC AAC GGC GGC CGG CTG GAC ATC CTC CTG TCG GCG GCC GAG TTC GCC ACC AAC CGG GAA als asn gly gly and lew asp the lew lew ser als als glw phe als the asn and glw 361/121 391/131 STO GAO COO GAO GOO GOO GTO GGO CGA GOG CTG TGC CTG GOO ATC GAO COA GAT C val asp pro asp gly als val gly arg ala leu cys leu ala ile asp pro asp

SEQ ID N° 36A

FIGURE 36%

31/11 ACC TGG GAC GAA GAC GAC GGC AGC AGC CGC AAT CAG ATC TAC CCG GTC CTG GTC AAC GTC thr trp asp glu asp asp gly ser ser arg ash gln ile tyr pro val leu val ash val 91/31 AAT GGA CAC CCG ACT ACG GTG CGC CTG CGC GGC TCG ACA ATG CGC GGT TCC TGT TGC CCG ash gly his pro the the val arg lew arg gly see the met arg gly see cys eys pro 121/41 151/51 TGG TCG GAG TGC CAC CCG ACC AGG CCA CCG ACT TCG GCT CCG CTG TTG CAC CAG AAA CGA trp ser glu cys his pro thr arg pro pro thr ser ala pro leu leu his gin lys arg 211/71 COO COC COO TOT GGA TOA COA TOC TOT GOC COC TOG COG ACC GGC CCC GOT TOO COC CCG ary ary any sar gly ser pro dys dys gly ary tro pro the gly pro gly tro pro pro 241/81 271/91 GGG CAC COG GTG GCA COG TTC COG TCC GGC TGG TCG ACG ACG ACG TGG CAA ACT CGC TGG gly his pro val ala pro phe pro ser gly trp ser the the the trp gin the arg trp 331/111 CCA ACG GCG GCC GGC TGG ACA TCC TCC TGT CGG CGG CCG AGT TCG CCA CCA ACC GGG AAG pro thr als als gly trp thr ser ser cys arg arg pro ser ser pro pro thr gly lys 361/121 391/131 TOS ACC COG ACG GOG COS TOS GOC GAG CGC TGT GOC TGG COA TOS ACC CAG ATC ser the pro the als pro see als glu and dys als top pro see the glo ile

SEQ ID N° 368

110/185

3.73 31/11 COT BOB AND AND AND AND GOA GOA GOO GOA AND AGA TOT AND DEG TOO TOO TOA AND TOA pro gly the lys the the als als als als ile arg see the arg see trp see the see 61/21 91/31 ATG GAC ACC CGA CTA CGG TGC GCC TGC GCG GCT CGA CAA TGC GCG GTT CCT GTT GCC CGT met asp the and lew and dys als dys als and gin dys als val pro val als and 151/51 GOT CGG AGT GCC ACC CGA CCA GGC CAC CGA CTT CGG CTC CGC TOT TSC ACC AGA AAC GAC gly arg ser als the arg pro gly his arg lew arg lew arg cys cys the arg aso asp 181/61 211/71 GGC GCC GGT CTG GAT CAC CAT GCT GTG GCC GCT GGC CGA CGG GCC CGG GTT GGC CCC CGG gly ala gly lew asp his his als val ala ala gly arg pro ala pro val gly pro arg 271/91 GGC ACC CGG TGG CAC CGT TCC CGT CCG GCT GGT CGA CGA CCT GGC AAA CTC GCT GGC gly the and trp his and ser and pro als gly and and and pro gly lys less als gly 301/101 331/111 CAA CGG CGG CCG GCT GGA CAT CCT CCT GTC GGC GGC CGA GTT CGC CAC CAA CCG GGA AGT gin arg are pro als gly his pro pro val gly gly arg val arg his gla pro gly ser 361/121 391/131 CGA CCC CGA CGG CGC CGT CGG CCG AGC GCT GTG CCT GGC CAT CGA CCC AGA TC ard pro arg arg arg arg pro ser ala val pro gly his arg pro arg

SEQ ID N° 36 C

FIGURE 36C

Séquence codante Bv3909 prédite par Cole et al., 1998 (Nature 393 537-544)

contenant Seg 36A 1/1 31/11 GTG ACC GCA CTG CAA CTC GGC TGG GCC GCT TTG GCG CGC GTC ACC TCA GCG ATC GGC GTC met thr sis low gin lew gly trp sis als lew sis arg val the ser als ile gly val 31/31 GTG GCC GGC CTC GGG ATG GCG CTC ACG GTA CCG TCG GCG GCA CCG CAC GCG CTC GCA GGC val als gly low gly met als lew thr val pro ser als als pro his als lew als gly 121/41 151/51 GAG COC AGE COG ACG COT TIT GTO CAG GTO CGC ATO GAT CAG GTG ACC CGG GAC GTG GTG giu pro ser pro the pro phe val gin val arg ile asp gin val the pro asp val val 181/61 211/71 ACC ACT TOU AGO GAA COO CAT STO ACC STO AGO SOA ACS STS ACC AAT ACC SST SAC OSC the the ser ser glo pro his val the val ser gly the val the asm the gly asp arg 241/81 271/91 CCA GTC CGC GAT GTG ATG GTC CGG CTT GAS CAC GCC GCG GTC ACG TCC TCA ACG GCG pro valuery asp valuet valuery low glu his ala ala ala valuer sor ser thr ala 301/101 331/111 TTA CGC ACC TOS CTC GAC GGC GGC ACC GAC CAG TAC CAG CCG GCC GCG GAC TTC CTC ACG

SEQ ID N° 36D

led arg the see led sap gly gly the eap gla typ gla pro als ale sap phe led the

FIGURE 36D

111/185

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361/121
                                         391/131
GTC GCC CCC GAA CTA GAC CGC GGG CAA GAG GCC GGC TTT ACC CTC TCG GCC CCG CTG CGC
val ala pro glu leu asp arg gly gln glu ala gly phe thr leu ser ala pro leu arg
                                         451/151
TOG CTG ACC AGG CCG TCG TTG GCC GTC AAC CAG CCC GGG ATC TAG CCG GTC CTG GTC AAC
ser leu thr arg pro ser leu ala vel asm gin pro gly ile tyr pro val leu val asm
481/161
                                         511/171
GTC AAT GGG ACA CCC GAC TAC GGT GCG CCT GCG CTC GAC AAT GCG CGG TTC CTG TTG
val asn gly thr pro asp tyr gly als pro als arg leu asp asn als arg phe leu leu
                                         571/191
CCC GTG GTC GGA GTG CCA CCC GAC CAG GCC ACC GAC TTC GGC TCC GCT GTT GCA CCA GRA
pro wal wal gly wal pro pro asp gln als the asp phe gly ser als wal als pro glu
                                         631/211
ACG ACG GGG GGG GTC TGG ATC ACC ATG CTG TGG CCG CTG GCC GAC CGG GCC CGG TTG GCC
the the ala pro wal tep ils the met less top pro less als asp and pro and less the met less top pro less also also the the the three properties.
                                         691/231
CCC GGG GCA CCC GGT GGC ACC GTT CCC GTC CGG CTG GTC GAC GAC GAC CTG GCA AAC TCG
pro gly ala pro gly gly the val pro val arg led val asp asp asp led als asm ser
721/241
                                         751/251
CTG GCC AAC GGC GGC CGG CTG GAC ATC CTC CTG TCG GCG GCC GAG TTC GCC ACC AAC CGG
led als asn gly gly arg led asp ile led led sor als als gld phe als the aso arg
                                         811/271
GAA GTC GAC COU GAC GGC GCC GTC GGC CGA GCG CTG TOO CTG GCC ATC GAC CCA GAT CTA
giu val asp pro asp gly ala val gly ard ala les cys les ala ile asp pro asp les
                                         871/291
CTC ATC ACC GTC AAT GCG ATG ACC GGC GGC TAC GTC GTC TCC GAC TCG CCC GAC GGG GCC
lau ila the val aso ala met the Gly gly tyr val val see asp see pro asp gly ala
                                         931/311
GOT CAA CTA COG GGC ACC COG ACC CAC COG GGC ACC GGC CAG GCC GCA TCC AGC TGG
ala gin lew pro gly the pro the his pro gly the gly gin als als see see tep
                                         991/331
CTG GAT CGA TTG CGG ACG CTA GTC CAC CGG ACA TGC GTG ACG CCG CTG CCT TTT GCC CAA
let asp and let and the let was his and the cys was the pro let pro phe ala gla
1021/341
                                         1051/351
GCC GAC CTG GAT GCT TTG CAG CGG GTT AAT GAT CCG AGG CTG AGC GCG ATC GCA ACC ATC
ala asp leu asp ala leu gin arg val asn asp pro arg leu ser ala ile ala chr ile
                                         1111/371
ASC CCC GCC GAC ATC GTC GAC CGC ATC CTG GAT GTC ACC TCC ACC CGC GGC GCA ACC GTG
ser pro als asp ile val asp arg ile leu asp val ser ser thr arg gly ala thr val
1141/381
                                         1171/391
CTG CCC GAC GGC CCG TTG ACC GGC CGG GCG ATC AAC TTG CTC AGC ACC CAC GGC AAC ACG
law pro asp gly pro lew the gly arg ala ile asm iou low ser the his gly asm the
                                         1231/411
GTT GCC GTC GCG GCC GCC GAT TTT AGC CCC GAG GAA CAG CAG GGT TCG TCC CAG ATC GGC
val ala val ala ala asa asp phe ser pro glu glu gln gin gly ser ser gln ile gly
1261/421
                                         1291/431
TOO GOO OTO TEA COO GOT ACC GOG COO COO COO TEO TOO COO CEG CEG GEA GOO SEG COO
ser als led led pro als the als pro arg arg led ser pro arg val val als als pro
                                         1351/451
TIT GAT OUT DOS OTO GOO OCC GOO OTS SOO SOO SOA ACA AAC COG ACC SIT OUT ADD
phe asp pro ala val gly sia ala leu ala ala ala gly the ash pro the val pro the
1381/461
                                         1411/471
THE CTA GAT COO TOO TTO THE STE COO ATC GOO CAT GAA TOO ATC ACC GOO COO CAG
tyr leu asp pro ser leu phe val arg ile ala his glu ser ile thr ala arg arg gln
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112/185

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1441/481
                                        1471/491
GAC GCC TTG GGC GCA ATG CTG TGG CGC AGC TTG GAG CCG AAT GCC GCG CCC CGT ACC CAA
asp als led gly ala met led trp ard ser led gld pro ash ala sia pro ard the gin
1501/501
                                        1531/511
ATC CTG GTG CCG CCG GCG TCG TGG AGC CTG GCC AGC GAC GAC GCG CAG GTC ATC CTG ACC
ile leu val pro pro ala ser trp ser leu ala ser asp asp ala gla val ile leu thr
                                        1591/531
GCG CTG GCC ACC GCC ATC CGG TCT GGC CTG GCC GTG CCG CGA CCA CTA CCG GCG GTG ATC
ala leu als thr ala ile arg ser gly leu als val pro arg pro leu pro als val ile
                                        1651/85%
GOT GAC GOO GOO GOO COO ACO GAG COA COO GAA COO COO GGO GOT TAC AGO GOO GOT COO
als asp ala ala arg the glu pro pro glu pro pro gly ala tyr ser ala ala arg
1681/561
                                        1711/571
GGC CGG TTC AAT GAC GAC ATC ACC ACG CAG ATC GGC GGG CAG GTT GGC CGG CTA TGG AAG
gly arg the ash asp asp ile thr thr gln ile gly gly gln vai ala arg led trp lys
1741/581
                                        1771/591
CTG ACC TOG GOG TTG ACC ATC GAT GAC CGC ACC GGG CTG ACC GGC GTG CAG TAC ACC GCA
leu thr ser als len thr ile sep asp arg thr gly leu thr gly val gln tyr thr als
1001/601
                                        1831/611
CCA CTA CGC GAG GAC ATG TTG CGC GCG CTG AGC CAA TCG CTA CCA CCC GAT ACC CGC AAC
pro leu and did asp met leu and ala leu sen din sen leu pro pro asp the and asn
                                        1091/631
GGG CTG GCC CAG CAG CGG CTG GCC GTC GTT GGA AAG ACG ATC GAC GAT CTT TTC GGC GCG
gly leu ala gin gln arg leu ala val val gly lys thr lie asp asp leu phe gly ala
1921/641
                                        1931/851
GTG ACC ATC STC AAC COG SGC GGC TCC TAC ACT CTG GCC ACC GAG CAC AGT COG CTG CCG
val the ile val ash pro-gly gly ser tyr the led ala the glu his ser pro-led pro-
1981/661
                                       . 2011/671
TTO GCG CTG CAT AAT GGC CTC GCC GTG CCA ATC CGG GTC CGG CTA CAG GTC GAT GCT CCG
led ala led his ash gly led ala val pro ile arg val arg led gln val asp ala pro
2041/681
                                        2071/691
CCC GGG ATG ACG GTG GCC GAT GTC GGT CAG ATC GAS CTA CCG CCC GGG TAC CTG CCG CTA
pro gly met the val ala asp val gly glo ile glu leu pro pro gly tyr leu pro leu
2101/701
                                        2131/711
CGA GTA CUA ATC GAG GTG AAC TIC ACA CAG CGG GTT GCC GTC GAC GTG TCG CTG CGG ACC
ard wal pro ile glu wal aso phe the glo ard wal ale wal asp was ser less and the
2161/721
                                        2191/731
CCC GAC GGC GTC GCG CTG GGT GAA CCG GTG CGG TTG TCG GTG CAC TCC AAC GCC TAC GGC
pro asp gly val als led gly glu pro val and led ser val his ser asm ala cyr gly
                                        2251/75%
AAG GYG YTG TYC GCG AYC ACG CTA TOC GCT GCG GCC GYG CYG GYA ACG CYG GCG GGC CGG
lys wal lew phe als ile the lew ser als als als val lew wal the lew ala gly arg
2281/761
                                        2311/771
COC CTT TOG CAC COG TTC COT GOC CAG CCT GAT CGC GCC GAC CTG GAT CGC CCC GAC CTG
arg lew try his arg phe arg gly gln pro asp arg ala asp low asp arg pro asp lew
                                        2371/791
COT ACC GGC AAA CAC GCC CCG CAG CGC CGT GCC GTA GCC AGT CGG GAT GAC GAA AAG CAC
pro thr gly lys his ala pro gln arg arg ale val ala ser arg asp asp glo lys his
2401/801
CGG GTA TGA
arg vel OPA
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SEQ ID N° 36D (suite 2)

FIGURE 36D (suite 2)

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ORF d'après Cole et al., 1998 (Neture 393 537-544) et contenant Rv 3909.

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1/1
                                        31/11
TGA CTC AGC ACC GGG TCA GCA CAA CGG TCC CGG GCC GGG GCC GTG ACC GCA CTG CAA CTC
OPA les ser the gly see als gin arg see ang sia gly ala val the ala les gin les
                                        91/31
680 TGG GCC GCT TTG GCG CGC GTC ACC TCA SCS ATC GGC GTC GTG GCC GGC CTC GGG ATG
gly trp sis als lew sis arg wal the see als the gly val wal als gly lew gly met
                                        351/51
GCG CTC ACG GTA CCC TCG GCG GCA CCC CAC GCG CTC GCA GGC GAG CCC AGC CCG ACG CCT
ala lau thr val pro ser ala ala pro his ala leu ala gly glu pro ser pro the pro
                                        211/71
TIT GIC CAS SIC CGC ATC GAT CAG GIG ACC CCG GAC GIG GIG ACC ACT TOC AGC GAA CCC
phe val gin val arg ile asp gin val the pro asp val val the the ser see giu pro
241/81
                                        271/91
CAT GTC ACC STC AGC GGA ACG STG ACC AAT ACT GGT GAC CCC CCA GTC CGC GAT GTG ATG
his val the val see gly the val the aso the gly asp and pro val and asp val man
301/101
                                        331/111
STO CGG CTT GAG CAC GCC GCC GCG STO ACS TOS TOA ACS GCG TTA CGC ACC TOS CTC GAC
val arg lew glu his ala ale ale val the ser ser the ale lew arg the ser lew asp
361/121
                                        391/131
SOC SOC ACC CAC CAG TAC CAG CCG GCC CCG GAC TTC CTC ACG GTC GCC CCC GAA CTA GAC
gly gly the asp gin tyr gin pro ala ala asp phe les the val ala pro glu les asp
                                        451/151
CGC 808 CAA GAG GCC 880 TTT ACC CTC TOS GCC COS CTS CGC TOU CTG ACC AGG COS TOS
ary gly gin glu ala gly phe the leu see ala pro leu ary see leu the ary pro see
481/161
                                        531/171
TTG GCC GTC AAC CAG CUC GGG ATC TAC CCG GTC CTC GTC AAC GTC AAT GGG ACA CCC GAC
lew als well aso gin pro gly lie tyr pro wal leu wal aso wal aso gly the pro asp
                                        571/191
TAC GGT GCG CCT GCG CGG CTC GAC AAT GCG CGG TTC CTG TTG CCC GTG GTC GGA GTG CCA
tyr gly ala pro ala arg leu asp aso ala arg phe leu lea pro val val gly val pro
601/201
                                        631/211
CON GAR CAG GOD ACC GAR TWO GGD TON GCT STY GUA COA GAA ACG ACG GOD COG GTO TGG
pro ssp gin als the asp phe gly see als values pro glu the the als pro val tep
                                        691/231
ATC ACC ATG CTG TGG CCG CTG GCC GAC CGG CCC CGG TTG GCC CCC GGG GCA CCC GGT GGC
ils thr met leu trp pro leu ala esp erg pro arg leu ala pro gly ala pro gly gly
721/241
                                         731/251
ACC STT CCC STC CGG CTG STC SAC GAC GAC CTG GCA AAC TCG CTG GCC AAC GGC GGC CGG
thr val pro val arg led val app asp sep led als ash ser led als ash gly gly arg
781/261
                                        811/271
CTG GAC ATC CTC CTG TCG GCG GCC GAG TTC GCC ACC AAC CGG GAA GTC GAC CCC GAC GGC
les asp ile les les ser ala ala glu phe ala the asp and glu val asp pro asp gly
841/281
                                        871/291
GOO GTC GGC CGA GCG CTG TGC CTG GCC ATC GAC CCA GAT CTA CTC ATC ACC GTC AAT GCG
als wal gly and als led dys led als the any pro any led ten the wal son als
                                        931/311
ATG ACC GGC GGC TAC GTC GTG TCC GAC TCG CCC GAC GGG GGC GCT CAA CTA CCG GGC ACC
met the gly gly tyr val val ser asp ser pro asp gly als als gin lew pro gly the
961/321
                                        991/331
COS ACC CAC COS GGC ACC GGC CAG GCC GCC GCA TOC AGC TOG CTG GAT CGA TTG CGC ACC
pro the his pro gly the gly gla ala ala ser ser cep led asp and led and the
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114/105

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1021/341
                                        1051/381
CTA STC CAC CGG ACA TGC GTG ACG CCG CTG CCT TTT GCC CAA GCC GAC CTG GAT GCT TTG
led wal his and the dys wal the pro led pro phe ala glo sla asp led asp ala led
1081/361
                                        1111/371
CAG CGG GTT AAT GAT COG AGG CTG AGC GCG ATC GCA ACC ATC AGC CCC GCT GAC ATC GTC
gin arg val asm asp pro arg leu ser ala ile ala thr ile ser pro ala asp ile val
                                        1171/391
GAC CGC ATC CYG GAT GYC AGC TOC ACC CGC GGC GCA ACC GYG CYG CCC GAC GGC CCG TYG
asp and the let asp val ser ser the and dly als the val let pro asp gly pro let
1201/401
                                        1231/411
ACC GGC CGG GCG ATC AAC TTG CTC AGC ACC CAC GGC AAC ACG GTT GCC GTC GCG GCC GCC
thr gly arg ala ile arm led led ser thr his gly asm thr val ala val ala ala ala
1261/421
                                        1291/431
GAT TIT AGG CCC GAG GAA CAG CAG GGT TOG TOC CAG ATO GGC TOC GCG CTC TTA CCC GCT
asp phe ser pro glo glo glo glo gly ser ser glo ile gly ser als leu leu pro ale
1321/441
                                        1351/451
ACC GOG CCC CGG CGG TTG TCC CCG CGG GTG GTA GGG GCG CCG TTT GAT CCC GCG GTC GGG
thr als pro arg arg less ser pro arg val val als als pro phe asp pro als val gly
1381/461
                                        1411/471
GOO GOG CTG GOO GOO GOG GGA ACA AAC COG ACC STI COT ACC TAT CYA GAT COC TOS TIG
ala ala leu ala ala ala gly thr asn pro thr val pro thr tyr leu asp pro ser leu
1441/481
                                        1471/491
TTO BIT COO ATO GOS CAT GAA TOS ATO ACO GOS OGO COO CAG SAC GOO TTG GGO GOA ATG
phe val arg ils ala his glu ser ils thr als arg arg gln asp als lew gly als met
1501/501
                                        1531/511
CTG TGG CGC AGC TTG GAG CCG AAT GCC GCG CCC CGT ACC CAA ATC CTG GTG CCG CCG GCG
leu trp arg ser leu glu pro ash ala ala pro arg thr glu ile leu val pro pro ala
1561/521
                                        1591/531
TOS TOS AGO CTG GCC AGO GAO GAO GCG CAG GTC ATO CTG AGO GCG CTG GCT AGO GCC ATO
ser trp ser lev als ser asp asp ala gin val ile lev thr ale lev ala thr ale ile
1621/541
                                        1651/551
COG TOT GGC CTG GCC GTG CCG CGA CCA CTA CCG GCG CTG ATC GCT GAC GCC GCG GCC CGC
ard ser gly led als val pro ard pro led pro als val ile als dep als als als ard
                                        1711/571
ACC GAG CCA CCG GAA COU CCG GGC GCT TAC AGC GCC GCT CGC GGC CGG TTC AAT CAC GAC
the giv pro pro giv pro pro gly ala typ ser ala ala org gly arg phe arm sep asp
1741/581
                                        1771/591
ATC ACC ACG CAG ATC GGC GGG CAG GTT GCC CGG CTA TGG AAG CTG ACC TGG GCG TTG ACC
ile thr thr gin ile gly gly glm val ala arg low trp lys low thr ser ale low thr
                                        1831/611
ATC GAT GAC CGC ACC GGG CTG ACC GGC GTG CAG TAC ACC GCA CCA CTA CGC GAG GAC ATG
ile asp asp arg thr gly leu thr gly val glo tyr thr als pro leu arg glu asp mer
1861/621
                                         1891/631
TTG CGC GCG CTG AGC CAA TCG CTA CCA CCC GAT ACC CGC AAC GGG CTG GCC CAG CAG CGG
iso arg als ieu ser gin ser leu pro pro asp the arg ash gly leu ala gin gin arg
                                        1951/651
CTS SCC STC STT SGA AAS ACG ATC SAC SAT CTT TTC SSC SES STS ACC ATC STC AAC CES
icu als val val gly lys thr ile asp asp low phe gly als val thr ile wal son pro
1981/661
                                         2011/671
GGC GGC TCC TAC ACT CTG GCC ACC GAG CAC AGT CCG CTG CCG TTG GCG CTG CAT AAT GGC
gly gly ser tyr thr leu als thr glu his ser pro leu pro leu sis leu his asn gly
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SEQ ID 36F (suite 1)

FIGURE 367 (suite 1)

115/185

2041/681 2071/691 CTC GCC GTG CCA ATC CGG GTC CGG CTA CAG GTC GAT GCT CCG CCC GGG ATG ACG GTG GCC ieu ala val pro ile arg val arg leu gin val asp ala pro pro gly met thr val ala 2101/701 2131/711 GAT GTC GGT CAG ATC GAG CTA CCG CCC GGG TAC CTG CCG CTA CGA GTA CCA ATC GAG GTG asp wal gly gin ile giu leu pro pro gly tyr leu pro leu arg wal pro ile glu wal 2161/721 2191/731 AMC TTO ACA CAG CGG GTT GCC GTC GAC GTG TCG CTG CGG ACC CCC GAC GGC GTC GCG CTG ash phe the gin arg val als val asp val ser low arg the pro asp gly val ala low 2221/741 2251/751 GOT GAA COG GTG CGG TTG TOG GTG CAC TOC AAC GOO TAC GGC AAG GTG TTG TTC GOG ATC gly glu pro val arg lew ser val his ser ash ala tyr gly lys val lew phe ala ile 2311/771 ACS CTA THE SET SES SEE STS CTS STA ACS CTS SES CSC CSG CSC CTT TGG CAC CSG TTC thr lew ser ala ala val lew val the lew ala gly and and lew trp his and pha 2341/781 2371/791 COT GOD CAG OUT GAT COU GOD GAD OTG GAT COU COU GAD OTG COT ACC GOD AAA CAC GOD ard gly gin pro asp arg als asp lew asp arg pro asp lew pro the gly lys his als 2401/801 2431/811 cog cag oge egt god gya god agt ogg gay gad gaa aas cad ogg gya tga pro gin arg arg ala val ala ser arg asp asp giu lys his arg val OPA

SEQ ID 36F (suite 2)

FIGURE 36F (suite 2)

1/1 31/11 ATC COC GCG TTG GCG TCG CAT CCG AAC ATC GTC GGA GTC AAG GAC GCC AAA GCC GAC CTG ile arg ala leu ala ser his pro san ile vol gly val lys asp ala lys ais asp leu 91/31 CAC AGO GGO GCC CAA ATO ATG GCC GAC ACO GGA CTG GCC TAC TAT TOO GGO GAC GAC GCG his ser gly als gin ile met als asp the gly led als tyr tyr see gly asp asp als 151/51 CTC ARC CTG CCC TGG CTG GCC ATG GGC GCC ACG GGC TTC ATC AGC GTG ATT GCC CAC CTG led asn led pro trp led ala met gly als thr gly phe ile ser vel ile als his led 211/71 GCA GCC GGG CAG CTT CGA GAG TTG TTG TCC GCC TTC GGT TCT GGG GAT ATC GCC ACC GCC ala ala gly gin lou arg giu leu lou ser ala phe gly ser gly asp ile ala thr ala 241/81 CGC AAG ATC arg lys ile

SEQ ID N° 37A

FIGURE 37A

116/185

1/1 31/11 GAT COG OGC GTT GGC GTC GCA TOC GAA CAT CGT CGG AGT CAA GGA CGC CAA AGC CGA CGT asp pro arg vai gly val ala ser glu his arg arg ser gln gly arg gln ser arg pro 61/21 91/31 GCA CAG CGG CGC CCA AAT CAT GGC CGA CAC CGG ACT GGC CTA CTA TTC CGG CGA CGA ala gln arg arg pro asn his gly arg his arg thr gly len len phe arg arg arg 151/51 GCT CAA CCT GCC CTG GCT GGC CAT GGG CGC CAC GGG CTT CAT CAG CGT GAT TGC CCA CCT ala gin pro ala leu ala gly his gly arg his gly leu his gin arg asp cys pro pro 181/61 211/71 GGC AGC CGG GCA GCT TCG AGA GTT GTT GTC CGC CTT CGG TTC TGG GGA TAT CGC CAC CGC gly ser and als als ser and val val val and led and phe trp gly tyr and his and 241/81 COG CAA GAT C pro gln asp

SEQ ID N° 37B

FIGURE 378

1/1									31/3									
TCC GCG	CGE	TGG	CGT	CGC	$\mathbb{A}T\mathbb{C}$	C@3	ACA	rog	LCQ	GAG	TCA	A00	ACQ	CCA	ÄÄĢ	CCG	ACC	TOC
ser als	arg	trp	arg	arg	110	828	2H2	292	ser	glu	380 E	arg	the	pro	198	pro	2312	gvs
61/21									92/3	11								•
ACA GCG	GCS	ccc	AAA	TCA	rgg	CCG	ACA	CCG	GAC	7000	Entropy.	2000	ATT	CCG	GCG	ACG	ACG	Car
thr ala	81.8	\$200	lys	ser	trp	$\operatorname{co} q$	the	\$2.00	asp	tro	pro	thr	ile	220	sla	thr	thr	8.00
151/41									151/	151								
TCA ACC	TÇC	CCT	GGC	760	CCA	TGG	GCG	CCA	099	GCC	TOA	TCA	606	YGA	TT	CCC	ACC	raa
ser thr	0.5.2	22.22	gly	\$ 55	pxo	trp	a1.3	\$2.00	*x3	ala	883	\$2.5°	ala	OFA.	1.60	03.0	the	tro
181/61									211/	71								**
CAS CCS	GGC	AGC	xxc	GAG	AGT	TGT	TGI	\mathbb{CCG}		TCG	GTT	CTG	666	ATA	TCG	CCA	ccc	aaa
gin pro	äŗÀ	367	phe	glu	2293	oys	cys.	$\mathfrak{p}_{\mathcal{X}\mathcal{Q}}$	pro	$\mathfrak{B}\otimes\mathfrak{E}$	V83	leu	gly	ile	ser	929	ozo	nro
241/01																		
GCA AGA	TC																	
ala arg																		

SEQ ID N° 37C

FIGURE 37C

117/185

Séquence codante Rv2753c prédite par Cole et al., 1998 (Nature 393 537-544) contenant Seq 37A

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181
                                        31/11
STS ACC ACC STC SGA TTC GAC STC SCA SCS CGC CTA SGA ACC CTG STG ACC SCS ATG STG
val thr thr val gly phe asp val ala als arg leu gly thr leu leu thr ala met val
                                        91/31
ACA COS TIT ASC GGC GAT GGC TOO OTG GAC ACC GCC ACC GGS GGG CGG CTG GGC AAD CAC
thr pro phe ser gly asp gly ser leu asp thr ala the ala ala arg leu ala asp his
121/41
                                        151/51
CTG GTC GAT CAG GGG TGC GAC GGT CTG GTG GTC TCG GGC ACC ACC GGC GAG TCG CCG ACC
led values gin gly cys asp gly led valued ser gly the the gly gld see pro the
101/61
                                        211/71
ACC ACC GAC GGG GAG AAA ATC GAG CTG CTG CGG GCC GTC TTG GAA GCG GTG GGG GAC CGG
the the asp gly glu lys ile glu leu leu arg ala val leu glu ala val gly asp arg
241/81
                                        271/91
GCC CGT GTT ATC GCC GGT GCC GGC ACC TAT GAC ACC GCG CAC AGC ATC CGG CTG GCC AAG
ala arg val ile ala gly ala gly thr tyr asp thr ala his ser ile arg leu ala lys
                                        331/111
GOT TOT GOG GOC GAG GOT GOG CAC GGG CTG CTG GTG GTC ACG CCC TAC TAT TOC AAG CCG
ala dys wis als glu gly als bis gly led led val val the pro tye tye see lys pro
361/121
                                        391/131
CUG CAG CGG GGG CTG CAA GCC CAT TTC ACC GCC GTC GCC GAC GCG ACC GAG CTG GCG ATG
pro gin ary gly lew gin als his phe thr als vol als asp als thr glu lew pro mer
421/140
                                        451/151
CTG CTC TAT GAC ATC CCG GGG CGG TCG GCG GTG CCG ATC GAG CCC GAC ACG ATC CGC GCG
lau lau tyr asp ile pro gly arg ser ala val pro ile glu pro asp thr ile arg ala
481/161
                                        311/171
TTO GCG TCG CAT CCG AAC ATC STC GGA GTC AAS GAC GCC AAA GCC GAC CTG CAC AGC GGC
leu ala ser his pro asn ile val gly val lys sep ala lys ala asp leu his ser gly
541/181
                                        571/191
GOO CAA ATE ATG GOO GAC ACO GGA CTG GOO TAC TAT TOO GGO GAC GAC GOG OTG AAC CTG
ala gin lie met als asp thr gly lew als tyr tyr ser gly asp asp als lew asn lew
                                        631/211
OUC TOS CTS SCC ATO SGC SCC ACS SGC TTC ATC AGC STS ATT SCC CAC CTS SCA SCC SGS
pro trp lew als mot gly als thr gly pho ile ser val lie als his lew als als gly
661/221
                                        691/231
CAS CIT CGA GAG TTG TTG TCC GCC TTC GGT TCT GGG GAT ATC GCC ACC GCC CGC AAG ATC
gio leu arg glo leo leu ser ala phe gly ser gly asp the ala the ala arg lys the
                                        751/251
AAC ATT GCG GTC GCC CCG CTG TGC AAC GCG ATG AGC CGC CTG GGT GGG GTG ACG TTG TCC
ash ile ala val ala pro leu cys ash ala met ser arg leu gly gly val the loc ser
781/261
                                        811/271
AAS GCG GGC TTG CGG CTG CAG GGC ATC GAC GTC GGT GAT CCC CGG CTG CCC CAG GTG GCC
lys ala gly lew and lew gin gly ile asp val gly asp pro and lew pro gla val ala
                                        871/291
GCG ACA CCG GAG CAG ATC GAC GCG TTG GCC GCC GAC ATG COC GCG GCC TCG GTG CTT CGG
ala the peo que gin ile asp ala leu ala ala asp met ang ala ala see val leu arg
```

901/301 TGA GPA

SEQ ID Nº 37D

110/185

ORF d'après Cole et al., 1998 (Nature 393 537-544) contenant pu2753c

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1/1
                                        31/11
TAA GGT GAG CGC CGT GGC CGA GAC CGC GCC GCT GCG CGT GCA ACT GAT CGC CAA GAC CGA
OCN gly glu arg arg gly arg asp arg ala ala ala arg ala the asp arg gln asp arg
                                        91/31
CTT CTT GGC CCC ACC CGA COT GCC CTG GAC CAC CGA CGC CGA CGG CGG ACC CGC GCT GGT
len len gly pro thr ang ang ala len asp his ang ang ang ang ang the ang ala gly
121/41
                                        351/51
CHA GTT CGC CGG CCG GGC CTG CTA TCA GAG CTG GTC CAA GCC CAA TCC CAA GAC CGC CAC
ard val ard ard pro gly led led ser gld led val glo ala glo ser glo asp arg his
                                        211/71
CAA COC COO CTA CCT CCG GCA CAT CAT CGA CGT COG ACA TIT CTC GOT GCT AGA GCA TOC
gin and and les pro pro ala his his and and and the phe less gly als and als the
241/81
                                        271/91
CAG CGT GTC GTT CTA CAT CAC CGG GAT CTC GCG ATC GTG CAC CCA CGA GCT GAT CCG CCA
gln arg val val leu his his arg asp leu als ile val his pro arg ale asp pro pro
301/101
                                        331/111
CCG GCA TIT CTC CTA CTC SCA GCT CTC CCA GCG CTA CGT ACC CCA GAA GGA CTC GCG GGT
pro als phe leu leu lou sia als leu pro als leu arg thr arg glu gly lou als gly
361/121
                                        391/131
COT COT GOO GOO CGG CAT GGA GGA CGA CGC CGA CCT GOG CCA CAT CCT GAC CGA GGC CGC
arg arg ala ala arg his gly gly arg arg pro ala pro his pro asp arg gly arg
                                        451/15%
CGA CGC CGC CCC CGC CAC CTA CAG CGA GCT GCT GGC CAA GCT GGA AGC CAA GTT CGC CGA
ard ard ard pro ard his les gin ard als als gly gin als gly ser gin val ard ard
                                        511/171
CCA ACC CAA CGC GAT CCT GCG CCG CAA GCA GGC CCG CCA AGC CGC CCG CGC GGT GCT GCC
pro thr gin arg asp pro als pro gin ala gly pro pro ser arg pro arg gly als ala
541/101
                                        571/191
CAA COC CAC CGA AAC COG CAT CGT GGT GAC CGG CAA CTA CCG GGC CTG GCG GCA CTT CAT
gin arg his arg asn pro his arg gly asp arg gin leu pro gly leu als als leu his
601/201
                                        631/211
CSC AAT GCG GGC CAG CGA GCA CGC CGA CGT GGA AAT CCG GCG ACT GGC CAT CGA ATG CCT
ary asn als gly gin are als are are are gly son pro als the gly his are met pro
                                         891/233
GCG CCA GCT CGC CGC CGT GCC CCC CGC GGT GTT CGC CGA CTT CGA GGT GAC CAC CCT GGC
ala pro ala arg arg arg gly pro arg gly val arg arg leu arg gly asp his pro gly
                                         791/251
COA COG CAC COA GOT GOC GAC CAG COC STI GGC GAC COA AGO CTG AGG CGC CGT GTC GCT
arg arg his arg gly gly asp glm pro val gly asp arg ser leu arg arg arg val ala
781/261
                                         811/271
GGA CAA ACA COU GUU CTC GCG GCC GGC ATA AAG CGC CAG GTA ACC TTG GGA GCC GTG ACC
gly gin thr arg ala led ala ala gly ile lys arg gin val thr led gly ala val thr
841/281
                                         871/291
ACC STC SGA TYC SAC STC SCA SCS CSC CTA SGA ACC CTS CTS ACC GCG ATS STG ACA CCS
the val gly phe asp val als als arg led gly the led led the als met wal the pro
901/301
                                         931/311
TTT AGC GGC GAT GGC TCC CTG GAC ACC GCC ACC GCG GCG CGG CTG GCC AAC CAC CTG GTC
phe ser gly sep gly ser low sep the als the als als arg low als as bis lew wal
961/321
                                         991/331
GAT CAS GGG TGC GAC GGT CTG GTG GTC TOS GGC ACC ACC GGC GAG TOS COG ACC ACC ACC
asp gin gly cys asp gly led wal wal ser gly the the gly gld see pro the the the
```

SEQ ID N° 37F

119/185

1021/341	1051/353
	CLC LLC BYY GCG GLG GCG GCC CGL
asp alv als les ile als les les ara ala	Asy yen din als Asy div was auc coa acc cal
1081/361	1111/37)
	GOS CAT AGO ATO CGG CTG GOD AAG GOT TGT
val ile als giv als giv the tur son the	ala his ser ile arg les ala lys ala cys
1141/381	1171/391
	GTC ACG CCC TAC TAT TCC AAG CCG CCG CAG
ala ala glu gly ala his gly len len vel	val the pro tyr tyr see lys pro pro gin
1201/401	1231/411
	GCC GAC GCG ACC GAG CTG CCG ATG CTG CTC
ard dly leu din ala his phe thr ala val	ala asp ala the glu leu pro met leu leu
1261/421	1291/431
TAT SAC ATC CCS GGG CGG TCG GCG GTG CCG	ATC GAG CCC GAC ACG ATC CGC GCG TTG GCG
tyr asp ile pro gly arg ser ala val pro	ile giu pro asp thr ile arg als les als
1321/441	1351/451
TOG CAT COG AAC ATO GTO GGA GTO AAG GAO	GOO AAA GOO GAO OTG CAO AGO GOO GOO CAA
ser his pro ash ile val gly val lys asp	ala lys ala asp leu his ser giy ala gin
1381/461	1411/471
ATC ATG GCC GAC ACC GGA CTG GCC TAC TAT	TOO OGO GAO GAO GOG OTO AAC OTO COO TGG
lile met ala asp the gly leu ala typ typ	ser gly asp asp ala leu asm leu pro rep
1441/481	1471/491
CTG GCC ATG GGC GCC ACG GGC TTC ATC AGC	GTG ATT GCC CAC CTG GCA GCC GGG CAG CTT
leu ala met gly alo the gly phe ile ser	val ile ala his les ala ala gly gin les
1501/501	1531/511
CGA GAS ITS ITS TOO SOO ITO SSI TOT S60	GAT ATC GCC ACC GCC CGC AAG ATC AAC AIT
- arg glu leu leu ser ala phe gly ser gly	asp ile els the sis arg lys ile asm ile
1581/521 .	1591/531
GCS GTC GCC CCG CTG TGC AAC GCG ATG AGC	CGC CTG GGT GGG GTG ACC TTG TCC AAG GCG
ala val ala pro leu cys asn ala met ser	arg lew gly gly val thr lew ser lys als
1621/841	1651/551
get the cod cie cas out aic sac sic so:	GAT CCC COG CTG CCC CAG GTG GCC GCG ACA
gly lew arg lew gin gly ile asp val gly	asp pro and less pro gla valuate als thr
1881/561	1711/571
CCO GAG CAG ATO GAO GOG TTG GOO GOO GAO	ATS CSC GCS GCC TCG GTG CTT CSG TGA
pro glu gin ile asp ala leu ala ala asp	met arg ala ala ser val leu arg OPA

SEQ ID N° 37F (suite 1)

FIGURE 37F (suite 1)

120/185

3/1	91/11
GCG GTG AAC 160 160 600 CGG ATG GTT CAA	STA COC CGT CGC AAA CTC GAG CAC AAC AGG
ala val aso trp trp ala arg met val gin	val and and and lys led glu his asm and
61/21	91/31
AGA CGA CGG ATG GAA GGA GAT GCT GGC GCC	COC CAG CTG ARC CCT OCC GAT GCG AAT ARG
sid and and mer din dia wab aya dia aya	gly gim law asm pro ala asp ala asm lys
321/43	151/51
TOG TOG TOT ACG GAG GTG AAG GOG GOG GAT	TOG GOG GAA TOT GAC GOG GOA GOD GAC CAG
ser ser ser thr glu vai lys ala ala asp	ser ala glu ser asp ala gly ala asp gln
181/61	211/71
vel eec see sve ele vve eec eel evil ise	GCG GAA TOT GAC GCC GGA GAG CTC GGC GAG
the Gly pro gin val lys als als asp ser	ala gin ser asp ala gly glo leu gly glo
241/81	271/91
enc end inc cay day and bad all bid dys	CGG CGC CCG TCG CGG TTG CGG CGA GGC TGG
sab era cha buo dro dro era ren ner din	arg arg pro ser and led and and did the
301/101	331/111
TIT OIL OUT AIR OLD SCH ARS UTG TIT CRIT	THE GCC GGT DEC CTT DGC GCA GCG GGT TAT
1981/131 Ten war div Tie and Sia the Ten Ten Sig	let als gly gly let gly als als gly tyr
	391/131
TIT GOG TIG OGG TOA CAG CAG GAN AGG CAA	TEA ATO GOD GOT GAG GAS OTT GOD GOT ATT
pae ara red arg sat his din din aer din 421/141	ser ile ala arg glu asp leu ala ala ile
	451/151
when the win have one man and the state of a	CAG SCA CCC GAT GCT GGG GCG ATG TCC GCT
- And the start and the second of the start of the start of the start of the second of the start of the second of	gin ala pro asp ala giy ala met ser ala
AGC ATG CAG AAG ATC	
ser met gin lys ile	
care more free rise who	

SEQ ID N° 38A

FIGURE 38A

1/1							31/11									
CAG CGG TGA	act s	GT 086	acc	ಹರಾಡ	TOTA	Section Co.			orn.	entre e	erra.	8.50	20000	مدروندروو	15 27 35	20 00000
gin arg OFA	. ಕಾರ್ಯ . ಕಾರ್ಯವ	iv elv	888	erl w	200	estores.	100 0	AND PE	and a	neralis.	and a	aneres.	5 505	20 May 20	1900 PG	districts.
61/21			Sec. 100 cm	2003	an with	greate	93/33	y *	200.00	9.88.6	08.25.05	200.000.00	35 RG 25	20.00	N. 63.50	3.83.6
oga gad gad	CCA T	OG AAG	CAC	ATG	cre	CCG		22	AGC	703	202	ons	222	2000	നമു	272
gly asp asp	gly t	rp lys	er 1. i.i	3000 E.	leu	ala	oro a	La	285	088	thr	Lou	2000	3,430	Arren	2 3 Kg
121/41			***				35275						See at	2000	20.00.00	30-30-07
AGT CGT CGT	CTAC	99 AGG	TGA	AGG	ପଞ୍ଜ	CGG	ATT C	Ç.Ç	೧೮೮	AAT	erg.	ACG	ccc	GAG	CCG	ACC
ser arg arg	leu a	ag arg	OPA	arg	8.£Q	arg	ile a	£Ψ	8333	ass	leu	tine	pro	สมัน	อะอ	tise
191/61							211/7	.3.								
AGA CTG GCC	CGC A	GG TGA	rog	CGG	coo	75.5	200 C	85 G	AAT	CTG	800	CCG	GAG.	A 180	res	000
arg les ala	ang a	zg OPA	axb	arg	arç	118	arg a	D.	888	3.983	enr	pro	glu	28 X	$\otimes \otimes \Sigma$	ala
241/81							271/9									
AGG ACG CGT	, ecc c	AG A&C	AGG	ccc	3.C.C	2.77	AGC G		GCC	CGT	Car	QQT.	TGC	GGC	0.463	CCT
ary thr aro	. 499 å	dn asn	ærg	p_{xa}	362	242	ser à	űy-	83.3.83.	arg	&CG	α_{i}, λ	$\mathbb{C}_{X}^{\times 3}$	giy	ផ្សំរូប	ai.a
301/101					** ***	******	331/1									
ecc me me	GCA T	re cee	CSSA.	CEC	3.00	2000	COT T	.693	cca	030	SCC	TTG	GOG.	CAG	COO	STT
gly leu leu	i älä l	şas ve.	exd	82.0	Ø\$x	225			bec	val	ala	leu	0.1.8	gln	$\mathfrak{a}\mathfrak{C}\mathfrak{P}$	Väl
361/121							391/1									
ATT TTG CGT	3,785. 8	KUT CAC	ACC	SKSKS.	BAR	SCC.	AAT C	AA.	32.0	0000	020	AGG	March Co	TTQ	093	ACCA
ile leu arç	e color s	rya mas	ana	wad	$r\lambda z$	818			2.02	arg	ala	8 E.Č.	ERE	7400	ang	$\mathfrak{g}_{\Sigma,0}$
421/141	e destroya can		2000000000	19999/200	2007/00/2007	as as as	481/1									
TTG AGG CCG	r Roder in	Refer 252 X	Section 5	2.236	CAMO	SUCA.	COC. R	(E. Helia	CAC	000	APG.	530	0.303	CGA	2000	CCC
leu arg pro 481/161	. # 40.00 W	स्टल उरक	83.48	763	exq	bro	arg s	erg	83.3	55.0	3366.53	1883	ärl	92.3	c.À.R	3.03
- CTA GCA TGC	ية يوندريو	central entere														
leu ala cys																
The water of a	· central so	·- y														

SEQ ID N° 38B

121/185

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1/1
                                        31/11
AGC GOT GAA CTG GTG GGC CCG GAT GGT TCA AGT ACG CCG TCG CAA ACT CGA GCA CAA CAG
ser gly glu leu val gly pro asp gly ser ser the pro ser gln the arg ale gln gin
61/21
                                        91/31
SAS ACG ACG GAT GGA ACG AGA TGC TGG CGC CGG CCA GCT GAA CCC TGC CGA TGC GAA TAA
glu thr thr asp gly arg arg cys trp arg arg pro als glu pro cys arg cys glu OCH
                                        151/51
OTO GTO GTO TAC GGA GGT GAA GGC GGC GGA TTO GGO GGA ATO TGA CGC CGG AGO CGA CCA
val val val tyr gly gly glu gly gly gly phe gly gly ile OFA arg arg ser arg pro
181/61
                                        211/71
GAC TGG CCC GCA GOT GAA GGC GGC GGA TTC GGC GGA ATC TGA CGC CGG AGA GCT CGG CGA
asp trp pro ala gly glu gly gly gly pho gly gly ilo OPA arg arg atg ala arg arg
                                        271/91
GGA CGC GTG CCC AGA ACA GGC CCT CGT CGA GCG GCG CCC GTC GCG GTT GCG GCG AGG CTG
gly arg val pro are the gly pro are are als als pro val als val als als are leu
301/101
                                        331/111
GCT TGT TGG CAT TGC GGC GAC SCT GCT CGC GTT GGC CGG TGG CCT 16G CGC AGC GGG TTA
ala cys trp his tys gly sap ala ale are val gly are trp pro trp are set gly leu
                                        391/131
THE TGC GTT GCG CTC ACA CCA GGA AAG CCA ATC AAT CGC GCG CGA GGA CCT TGC GGC CAT
phe cys val als les the pro gly lys pro ile son and als and gly pro cys gly his
421/141
                                        451/151
TGA GGC CGC TAA GGA TIG CGT TGC GGC CAC GCA GGC ACC CGA TGC TGG GGC GAT GTC GGC
OFA gly and OCH gly led and dys gly his ale gly the and dys trp gly asp wal gly
481/161
TAG CAT GCA GAA GAT C
AMB his ala glu asp
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SEQ ID N° 38C

122/185

Séquence AvCl75 prédite par Cole et al., 1998 (Nature 393 537-544) et contenent seq39A

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1/1
                                        31/11
STG AAG GOG GOG GAT TOG GOG GAA TOT GAO GOO GGA GOO GAO CAG ACT GGO COG CAG GTG
val lys ala ale sop ser ala glu sor asp ala gly ale asp gln the gly pro gln val
                                        91/31
aas sos sos gat tos sos gaa tot sac soc sga sag oto osc sas cac sos tsc oca saa
lys als ala asp ser ala glu ser asp ala gly glu leu gly glu asp ala cys pro glu
121/41
                                        151/51
cag god ott gyd gag ogg ogd odg tog ogg tyg ogg oga ggd tog oyy gyt ggd att god
gin ala leu vai giu arg arg pro ser arg leu arg arg gly trp leu vai gly ile ala
                                        211/71
GCG ACG CTG CTC GCG TTG GCC GGT GGC CTT GGC GCA GCG GGT TAT TYT GCG TTG CGC TCA
als thr leu leu ala low als gly gly low gly ale als gly tyr phe als low arg sor
241/81
                                         271/91
CAC CAG GAA AGU CAA TOA ATO SOG COU GAG GAD CYY GOG GOO ATY GAG GOO GOT AAG GAT
bis gin giu ser gin ser ile als ary giu asp leu als als ile giu als als lys asp
301/101
                                        331/111
TOC OTT GOG GOU AUG CAG GOA COO GAT GOT GOG GOG ATG TOG COT AGO ATG CAG AAG ATG
cys val als als the gin als pro sop als gly als met sor als see met gin lys lie
361/121
                                        391/131
ATC GAG TOT GOD ACC GGT GAT TIC GGT GCC CAG GCG TCG TIG TAC ACC AGC ATG CTC GTC
ile glo cys gly thr gly asp phe gly als gin als ser led tyr thr ser met led val
421/141
                                        451/151
gag gog tat caa gog god ago gto cao gtg caa gtg aco gat atg ogo gog gto gag
glu als tyr gin ala ala ser val his val gin val thr asp met arg ale ala val gio
481/161
                                        811/171
CGC AAC AAC AAT GAC GGG TOG STO GAT GIT OTS GTS GCG CTC CGG CTC AAG GTS TOC AAC
arg ash ash ash asp gly ser val asp val leu val ala leu arg val lys val ser ash
541/181
                                        571/191
ACC GAC TOG GAT GUO CAT GAA STO GGC TAC COT CTT CGG GTO CGG ATO GCA CTG GAT GAG
thr asp ser asp ala his glu val gly tyr arg leu arg val arg met ala leu asp glu
601/201
                                        631/211
GGC CGC TAT AAG ATC GCC AAA CTC GAC CAG GTG ACG AAG TGA
gly arg tyr lys ile ala lys leu asp gln val thr lys opa
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SEQ ID N° 38D

FIGURE 38D

123/185

ORF d'après Cole et al., 1998 (Nature 393 537~544) Contenant Rv0175

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1/1
                                        31/11
TGA ACT GGT GGG GCC GGA TGG TGT CAA GTA CGC CGT CGC AAA CTC GAG CAC AAC AGG AGA
OPA the gly gly ala gly tep cys gin val arg arg arg lys les glu his asn arg arg
61/21
                                        31/31
CGA CGG ATG GAA GGA GAT GCT GGC GCC GGC CAG CTG AAC CCT GCC GAT GCG AAT AAG TCG
arg arg met glu gly asp ala gly sla gly gln leu asn pro sla asp als asn lys ser
                                        151/51
TOG TOT ACG GAG GTG AAG GOG GOG GAT TOS GOG GAA TOT GAC GOD SGA GOD GAD CAG ACT
ser ser thr glu val lys ale ale asp ser ale glu ser asp ale gly ale asp glo the
181/51
                                        211/71
GGC COS CAG GTG AAG GCG GCG GAT TOG GCG GAA TOT GAO GCC GGA GAG CTC GGC GAG GAC
gly pro gin val lys ala ala asp ser ala glu ser asp ala gly glu leu gly glu asp
                                        271/91
GCG TGC CCA GAA CAG GCC CTC GTC GAG CGG CGC CCG TCG CGG TTG CGG CGA GGC TGG CTT
ala cya pro glu gin ala leu val glu arg arg pro ser arg leu arg arg gly trp leu
301/101
                                        331/111
GTT GGC ATT GGG GGG ACG CTG CTC GGG TTG GGC GGT GGC CTT GGC GCA GGG GGT TAT TTT
val gly lie ala ala the les les ala les als gly gly les gly ala ala gly tye phe
361/121
                                        391/131
GCG TTG CGC TCA CAC CAG GAA AGC CAA TCA ATC GCG CGC GAG GAC CTT GCG GCC ATT GAG
ala leu ary ser his gin glu ser gin ser the ata ary glu asp leu ata ala ite giu
421/141
                                        451/151
GCC GCT AAG GAT TGC GTT GCG GCC ACG CAG GCA CCC GAT GCT GGG GCG ATG TCG GCT AGC
sia ala lys asp cys val ala ala thr gin ala pro asp ala gly ala met sor ala ser
481/161
                                        511/171
ATG CAS AAS ATC ATC GAG TGT GGC ACC GGT GAT TTC GGT GCC CAG GCG TCG TTG TAC ACC
met gin lys ile ile glu cys gly thr gly asp phe gly ale gin ale ser led tyr thr
                                        571/191
AGO ATG CTC GTC GAG GCG TAT CAA GOG GCC AGO GTC CAC GTG CAA GTG ACC GAT ATG CGC
ser met leu val glu ala tyr gln ala ala ser val his val gln val the asp met arg
801/201
                                         631/211
GCG GCG GTC GAG CGC AAC AAC AAT GAC GGG TCG GTC GAT GTT CTG GTG GCG CTC CGG GTC
sia ala vai giu arg asn asn asn asp gly ser val asp val leu val ala leu arg val
                                         691/231
AAG GTG TOO AAC ACC GAC TOG GAT GOO CAT GAA GTO GGO TAC COT CTT EGG GTO CGG ATG
lys wal ser aso the asp see asp ala his glu wal gly tyr arg leu arg wal arg met
721/241
                                         751/251
GCA CTG GAT GAG GGC CGC TAT AAG ATC GCC AAA CTC GAC CAG GTG ACG AAG TGA
als lew asp glu gly arg tyr lys ile als lys lew asp gln val thr lys OPA
```

SEQ ID N° 38F

FIGURE 38F

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SEQ ID N° 39A

FIGURE 39A

1/1

CAC CTC CCC CGC CGC CGC CGC TGC CGC CGC TTC CCT TTC CCA AGG AAT GTC CGG CGC CGG
his leu pro pro arg arg arg cys arg arg phe pro phe pro arg asm val arg arg arg
61/21

GCG TGA TGC AAG GCT GCC TTG AGA GCA CCA GCG GCT TGA TCA TGG GCA TCG ACA GCA AGA
ala OPA cys lys ala ala leu arg ala pro ala ala OPA ser trp ala ser thr ala arg
121/41

CCG CAC TGG TCG CCG AGC GCA TCA CCG GTG CCG TCG AGG AGA TC
pro his trp ser pro ser ala ser pro val pro ser arg arg

SEO ID N° 398

FIGURE 39B

SEQ ID N° 390

125/185

Séquence codante Sv3006 prédite par Cole et al., 1998 (Nature 39) 537-548) et concenant seq39A

```
3/1
                                        31/11
ATG TGG ACA ACG CGG TTG GTT CGA TCC GGA CTC GCC GCG CTG TGC GCG GCA GTG CTG GTA
Met trp thr thr arg lew val ary ser gly lew als als lew eye als als val lew val
61/21
                                        91/31
TOG AGE GGC TOC OCA COG TTO AGC GAC OCT CAA TOY CAG COG TYC ACC AGC GAA COG GAG
ser ser gly dys als arg phe ash asp als gin ser gin pro the thr glu pro glu
321/43
                                        151/51
CTG CGG CCC CAA CCC AGC TCG ACA CCT CCC CCC CCG CCG CCG CTG CCG CCG STT CCC TTT
led and pro gin pro ser ser the pro pro pro pro pro pro led pro pro val pro phe
381/63
                                        211/71
CCC AAG SAA TOT COG GCG CCG GGC GTG ATG CAA GGC TGC CYY GAG AGC AGC AGC GGC TTG
pro lys glu cys pro ala pro gly val met gln gly cys leu glu ser thr ser gly leu
241/81
                                        271/01
ATC ATG GGC ATC GAC AGC AAG ACC GCA CTG GTC GCC GAG CGC ATC ACC GGT GCC GTC GAG
ile met gly ile asp ser lys thr als leu vai als glu and ile thr gly als val glu
301/101
                                        331/111
GAG ATC TOT ATC AGO GOD GAG DOG AAG GTA AAG ADG OTC ATT OCC GTG GAT DOT OCC GGT
glu ile ser ile ser ala glu pro lys val lys thr val lle pro vei asp pro ala gly
361/121
                                        391/131
SAC OST SEC TTS ATG GAS ATT STG CTG TCG CSC ACC TAC TCG CAA GAS CGG CTG ATG TAC
asp gly gly law met asp ile val law ser pro thr tyr ser gln asp arg lew met tyr
421/141
                                        451/161
SECT TAC ATT ASSC ACG CCC ACC GAC AAC CGG GTG GTG CGA GTG GCC GAC GGC GAC ATT CCC
ala tyr ile ser the pro the asp asn arg vai vai arg val ala asp gly asp ile pro
481/181
                                        811/171
AAG GAC ATT CTG ACC GGC ATC CCC AAA GGT GCT GCC GGT AAC ACC GGG GCG GTG ATC TTC
lys asp ile leu thr gly ile pro lys gly als als gly asn thr gly sis leu ile phe
541/181
                                        871/191
ACC AGT COU ACC ACG CTG GTC GTG ATG ACC GGG GAT GCT GGC GAC CCG GCG TTG GCC GCC
the ser pro the the leg val wal met the gly app ala gly app pro ala leg ala sia
                                        631/211
GAT COO CAA TOO TIG GOO GOT AAG DID CIG COT AID GAA CAG SOD AND AND AID GOS CAG
asp pro gin ser lew ala gly lys wal lew arg the glu gin pro the the ile gly gin
661/221
                                        691/231
ACC CCC CCC ACC ACC GCC CTC TCT GGC ATC GGC TCC GGC GGC GGC TTG TGC ATC GAT CCG
the pro pro the the ala lew see gly ile gly see gly gly lew cys ile amp pro
721/241
                                        791/251
STC SAC GGC 100 CTA TAT GTC DOC GAC OGC ACG CCA ACG GGG GAC CGA TIG CAG CGC AIC
val asp gly ser less tyr val als asp arg thr pro the als asp arg less gln arg ile
781/261
                                        811/271
ACC ANG AND TOG GAG STO TOT ACG STA TOG ACC TOG COG GAD AAG COD GAD STO GOD GOG
the lys san see giv val see the val top the tep pro asp lys pro gly val ala gly
841/281
                                        871/291
TGT GEC GOG ATT GAC GUC ACC GIG CTG GTC AAC CTG ATT AAT ACC AAA CTG ACG GTG GCG
cys als als met asp gly the val law val asm low ile asm the lys lew the val als
901/30%
                                        931/311
GTT COO SIE GES EEG TEG ACE GGT GEG GTT ACE GGA GAN EET GRE GTT GTE EGE ANA GAE
val and lew als pro ser the gly als val the gly glu pro asp val val and lys asp
961/323
                                        991/331
ACT CAT GOG CAT GOG TGG GGA TTA OGG ATG TGG GOG GAC GGC AAC GTC TGG GGA GGC ACC
the his als his sie try ale led arg met ser pro asp gly sen val try gly sie the
1021/341
                                        1051/351
GTC AAC AAG ACC GCC GGC GAC GCC GAG AAG CTC GAC GAT GTG GTG TTC CCG CTG TTC CCG
val asn lys thr als gly asp als glu lys lev asp asp val val give pro len phe pro
1081/361
                                        1313/373
CAG GGT GGC GGC TTC CGG GGC AAC AAC GAG GAC AAG AAC TGA
gln gly gly giy phe pro arg asn asn eap asp lys the OPA
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SEQ ID N° 39D

FIGURE 39D

126/185

ORF d'après Cole et al., 1998 (Nature 393 537-544) et contenant Rv3006

```
31/11
TAA GGC CAT TYA GTG CCG AAT TGG GGA TTT GAG CGG CGC TTT CGC CAG ACA ATC CGC ACA
OCH gly his lew wal pro asn trp gly phe glo arg arg phe arg gin thr lie arg thr
                                        91/31
TIG ACC CIG ACC AGC CCA CCA AAA GGC CCC AAT TOG GCC GCC ATG CCG ACA GTG COC ACC
leu thr leu thr ser pro pro lys gly pro asn trp ala ala met pro thr val arg thr
                                        151/31
CCG GCA GGT GGC GGC GAT GCC CAC AAT GTC CGT AGC CTG TCG GTC ATG TGG ACA ACG CGG
pro sia gly gly alp asp ala his aso val arg ser led ser val met trp thr thr arg
181/61
                                        211/71
TTG GTT CGA TCC GGA CTC GCC GCG CTG TGC GCG GCA GTG CTG GTA TCC AGC GGC TGC GCA
leu val arg ser gly leu ala ala leu cys ala ala val leu val ser ser gly cys ala
241/81
                                        271/91
CGG TTC AAC GAC GCT CAA TCT CAG CCG TTC ACC ACC GAA CCG GAG CTG CGG CCC CAA CCC
arg phe asn asp ala gin ser gin pro phe thr thr glu pro giu leu arg pro gin pro
301/101
                                        331/111
AGC TOG ACA COT COC COC COG COG COG COG COG GOT COC TYT COC AAG GAA TOY COG
ser ser thr pro pro pro pro pro pro leu pro pro val pro phe pro lys glu dys pro
361/121
                                        391/131
GCG CCG GGC GTG ATG CAA GGC TGC CTT GAG AGC ACC AGC GGC TTG ATC ATG GGC ATC GAC
sia pro gly val met gin gly dys led glu ser the ser gly led lie met gly ile ser
421/141
                                        451/161
AGC AAG ACC GCA CTG GYC GCC GAG CGC ATC ACC GGT GCC GTC GAG GAG ATC TCT AYC AGC
ser lys thr als led val als glu arg ile the gly als val glu glu ile ser ile ser
481/161
                                         511/171
GCC GAG CCG AAG GTA AAG ACG GTC ATC CCC GTG GAT CCT GCC GGT GAC GGT GGC TTG ATG
als give pro lys wel lys the wal ile pro wal cop pro als gly asp gly gly led met
                                         571/191
GAC ATT GTG CTG TCG CCC ACC TAC TCG CAA GAC CGG CTG ATG TAC GCC TAC ATG AGC ACG
asp ile val led ser pro thr tyr ser gin sop and led met tyr ale tyr ile ser thr
601/201
CCC ACC GAC AAC CGG GTG GTG CGA GTG GCC GAC GCC GAC ATC CCC AAG GAC ATC CTG ACC
pro thr asp asn arg val val arg val ala asp gly asp ile pro lys asp ile led the
                                         691/231
GGC ATC CCC AAA GGT GCT GCC GGT AAC ACC GGG GCG CTG ATC TTO ACC AGT CCC ACC ACG
gly lie pro lys gly ala ala gly aso the gly ala leu ile phe the ser pro the the
721/241
                                         751/251
CTG GTC GTG ATG ACC GGG GAT GCT GGC GAC CCG GCG TTG GCC GCC GAT CCC CAA TCC TTG
leu val val met the gly asp ala gly asp pro ala leu ala ala asp pro gln ser leu
                                         811/271
GOO GOT AAG GTO OTG COT ATO GAA CAG COO ACO ACO ATO GGO CAG ACG COG COG ACG ACG
als gly lys val led and the glo gln pro the the the gly gln the pro pro the the
841/281
                                         871/291
GCG CTG TOT GGC ATO GGC TOO GGC GGC GGC TTG TGC ATO GAT COG GTC GAC GGC TOO CTA
ala lou ser gly ile gly ser gly gly gly leu cys ile asp pro val asp gly ser leu
991/301
                                         931/311
TAT OTC GOO GAC COU ACG COA ACG GOG GAC CGA TTG CAG CGC ATC ACC AAG AAC TOG GAG
tyr valuate aspary the protine ale asparg led gin and the the lys aso see glu
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SEQ ID N° 39F

FIGURE 39F

127/185

961/321 991/331 STC TCT ACG STA TWG ACC TWG CCS SAC AAS CCC GGC GTG GCC GGG TGT GCC GCG ATG GAC val ser the val tep the tep pro asp lys pro gly val als gly cys als als met asp 1021/341 1081/361 SEC ACC STS CTS STC AAC CTS ATT AAT ACC AAA CTS ACS STS GCS STC CGS CTC GCS CCG gly thr val lee val aso lee ile aso thr lys lee the val als yet arg lee als pro 1081/361 1111/371 TOG ACC GGT GCG GTC ACC GGA GAA CCC GAC GTT GTC CGC AAA GAC ACT CAT GCG CAT GCG ser the gly als val the gly glu pro asp val val and lys asp the his als his als 1141/381 1171/391 TGG GCA TTA CGG ATG TCG CCG GAC GGC AAC GTC TGG GGA GCC ACC GTC AAC AAG ACC GCC trp als led and met sec pro asp gly asn val top gly als the val asn lys the als 1231/411 GOT GAT GET GAG AND CIT GAT GAT GIG GIG TIT COD ONG TIT COD CAG GGT GGT GGT GGT TIT gly asp ala glu lys led asp asp val val pha pro ieu phe pro gln gly gly gly phe 1261/421 CCG CGC AAC AAC GAC GAC AAG ACC TGA pro arg ash ash asp asp lys thr OPA

SEQ ID N° 39F (suite)

FIGURE 39F (suite)

1/1 31/13 GAA GGC CTT GTT GAG CCG GCG CAC GAA AAC GAT CGT TOT GTG TAC ATT GGT GTG TAT GGC glu gly leu val glu pro ala his glu asn asp arg cys val tyr ile gly val tyr gly 61/21 91/31 TOW OUT GAA COT GUA TOU GOO CGA CGA ATT OOC GGA CCG CGC CAG GGC GCG GUT GAA ser wal glu and wal dys als and and ile gly gly ale and glo gly als gly leu glu 121/41 151/51 COT CTC GGC GCT GAC TCA GGC CGC GAT CAG TGC CGA GTT GGA GAA CTC CGC AAC CGA TGC ard led gly als asp ser gly ard asp glo cys ard val gly gld led ard ass ard cys 211/71 STG GCT TGA GGG GTT GGA ACU CAG AAG CAC CGG CGC TCG GCA TGA TGA CGT GCT GGG TGC val als OPA gly val gly the glo lys his arg seg see als OPA OFA arg als gly eye 271/91 GAT CGA TGC CGC TCG CGA TGA GTT CGA AGC GTG AGA GCA TCG CCC ACT TCG CCG CCG GAG asp arg cys arg ser erg OPA val arg ser val arg sia ser pro the ser pro pro glu 301/101 331/111 CAS STS STC STC SAC SCS AST SCC ATS STS SAT C gin val val val asp als ser als met val asp

SEQ ID N° 40A

FIGURE 40A

128/185

1/1 31/11 AAG GCC TTG TTG AGC CGG CGC ACG AAA ACG ATC GTT GTG TGT ACA TTG GTG TGT ATG GCT lys als led let ser arg arg thr lys thr ile val val cys thr led val cys met als 91/31 CGG TTG AAC GTG TAT GTG CCC GAC GAA TTG GCG GAG CGC GCC AGG GCG CGG GGC TTG AAC arg leu asn val tyr val pro asp glu leu ala glu arg ala arg ala arg gly leu asn 121/41 151/51 GTC TOG GOG CTG ACT CAG GOO GOG ATC AGT GOO GAG TTG GAG AAC TOD GOA ACC GAT GOG val ser ala len thr gln ala ala ile ser ala glu len glu asn ser ala thr asp ala 211/71 TEG CTT GAG GOG TTG GAA CCC AGA AGC ACC GGC GCT CGG CAT GAT GAC GTG CTG GGT GCG trp let glu gly let glu pro arg ser thr gly ala arg his asp asp val let gly ala 241/81 271/91 ATC GAT GCC GCT CGC GAT GAG TTC GAA GCG TGA GAG CAT CGC CCA CTT CGC CGG AGC ile asp ala ale arg asp glu phe glu ala OPA glu his arg pro leu arg arg ser 301/101 331/111 AGG TGG TCG TCG ACG CGA GTG CCA TGG TGG ATC arg trp ser ser the arg val pro trp trp ile

SEQ ID Nº 408

FIGURE 408

1/1									31/11								
AGG CCT	TGT	TGA	QCC	ggc	GCA	CGA	AAA	CGA	TCG TTG	TGT	GTA	CAT	TGG	TGT	GTA.	TGG	ore
arg pro	cys	ARO,	828	gly	813.	arg	1ys	arg	ser leu	oys	V&3	his	tro	878	Val	time	len
61/21									91/31								
GGT TGA	ACG	\$ G.Z	MIG	$\mathcal{X}CC$	acc	ACG	$\mathbb{A}\mathbb{A}\mathbb{T}$	TGG	CGG AOC	gaa	CCA	999	QQC	GGG	COT	TGA	ACG
gly OPA	thr	cys	me v	CNS	pro	thr	882	trp	arg ser	81.3.	pro	933	8.53	gly	સંદેશ	OPA	thr
121/41									151/51								
TCT CGG	CGC	$\mathcal{Z}GA$	CTC	$\mathcal{A}\mathcal{Q}\mathcal{Q}$	$\mathcal{Q}\mathcal{Q}\mathcal{Q}$	\mathcal{CGA}	TCA	GTG	ccs acr	TGG	AGA	ACT	CCG	ಷ್ಟ	cos	ATG	CGT
ser arg	arg	OFA	ÿŝū	arg	220	3.7%	865	val	pro ser	trp	arg	the	gzo	gla	pro	10000 St	820
191/61									211/71								•
GGC TTG	Z. (2.0)	ggt	TGG	AAC	CCA	GAA	SCA	000	GCG CTC	990	ATG	ATG	ACG	TGC	TGG	GTG	CGA
gly leu	arg	ğly	txp	888	$px\phi$	glu	82.8	pro	ala leg	gåy	SERV. T.	338	thr	CVS	tro	val	ara
241/81									271/91					-			
TCG ATG	ccs	CDC	908	ATG	agt	TCG	AAG	CGT	GAG AGC	ATC	GCC	CAC	TTC	GCC	sec	GGA	A.M.
ser met	pro	ો હવા	83.8	ಚಾರ್ಚ	$\otimes \otimes x$	88.5	lys	arg	glu sez	ile	ala	his	20.0	ala	ala	ខាន់ទ	ala
301/101								•								30	
COT GGT	cor	CGA	CGC	GAG	TGC	CAT	SSI	GGA	20								
gly gly	arg	8.0%	& £*@	લુક્રેપ	cys	bis	gly	gly									

SEQ ID N° 40C

129/185

Séquence codante 8v0549c prédite par Cole et al., 1998 (Nature 393:537-544)et contenant seq40A

```
1/1
                                         31/11
gtg aga goa tog occ act tog oeg ong gag oag gtg gto gto gao geg agt gon atg gtg
val arg als ser pro the ser pro pro glu gln val val val asp als ser als met val
                                         91/31
gat ota otg got ogo aen ago gat ogg tge tet gog gog oge gog ogg otg get ogg ace
asp ion lon ala arg thr ser asp arg cys ser ala val arg sia arg len ala arg thr
                                         151/51
gog atg can gog cog gog can the gat gon gag gog tog tog gog etg ggg ego atg cag
als met his ala pro als his phe asp als glu val leu sor als leu gly arg met gln
                                         211/71
ogo gon gge gos etc sec git goo tat git gas gat gog ges eng gag gag tig ogs cag gig
arg ala gly ala leu thr val ala tyr val asp ala ala leu glu glu leu arg çin val
241/81
                                         271/91
ong gig art nga can ggt ett tog tog oig ett got gga gog igg tog ogn egn gan ann
pro val the arg his gly less set see less less als gly ala tep see arg arg asp the
301/101
                                         331/111
ete ogo etg ace gat gee ete tae gto gag etg gee gaa acy gea ggt etg gtg ttg teg
leu arg leu thr asp mla leu tyr vel gio leo els giu thr ala gly leu val leu leu
361/121
                                        391/131
ace ace gas gas aga ttg ges ego ged tog see tog get ese ged ste ggd tgs
the the asp glo and led alm and alm tep pro ser alm his alm its gly OPA
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SEQ ID N° 400

FIGURE 400

ORT d'après Cole et al., 1998 (Nature 393:537-544) et contenant Ry5549c

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31/11
tga gtt cga age gtg aga gea teg een ach heg eng eng eng gag eag gtg gte gee geg
OPA val arg ser val arg als ser pro thr ser pro pro gle gle val val asp ala
                                        91/01
agt got atg gtg gat eta eig get ogt agt age gat ogg tge tet geg gtg ogs geg egg
ser ala met val asp leu leu ala arg thr ser asp arg dys ser ala val arg ala arg
121/41
                                        151/81
oty got opg aco gog aty cao gog cog gog cao too gat goa gay gog tog tog gog oty
leu ala arg thr ala met his ala pro ala his phe asp ala glo val leu ser ala leo
                                        211/71
ggg ege atg cag ege gee gge gea etc ace gtt gee tat gte gat geg gea etg gag gag
gly arg met gin arg ala gly ala leu thr val ala tyr val asp ala ala leu glu glu
241/91
                                        271/91
ttg ega cas gtg cog gtg act oga cac ggt ott tog tog etg ett get gga geg tgg tog
led arg gin val pro val the arg his gly led ser ser led led ala gly als trp ser
                                        331/111
age ego gao acc ete ego etg acc gat goo etc tan gin gag etg goo gaa ang goa ggt
ary arg asp the lew arg lew the asp ala lew tyr val glu lew ala glu the ala gly
381/121
                                        391/131
etg gtg ttg ttg aco acc gac gaa aga ttg goa cyc gut tgg oco teg got vac goo atc
led values led the the asp glu arg led als arg als top pro see als his als ile
421/141
ggo tga
gly 08%
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SEQ ID N° 40F

130/185

1/1 31/11 CCT GGC CGG GAC GCC TAC GTG TAG CCC GCG GCT AGC ACA GGA TAG CCA TTG TTG TGC GGT pro gly arg asp ala tyr val AMB pro ala ala ser the gly AMB pro less less cya gly 61/21 91/31 AGC GCC AAA ACG ATC AGC CCT TCG CGG ACA TGT CAG CAC CCG CCT TGG CCG GGA GAG CGG ser ala lys the ile ser pro ser and the dys gin his pro pro top pro gly glu and 151/31 COT COT GAC COT GCT STC ACC ACG TCT GGT TAG GCT CGG GGC GCG GGC TGG CGC GGA GGA ard ard asp ard als was the the see gly AMB als and gly six gly tep ard gly gly 211/71 GOT GTG TTG COG AGG AGG TGT GTT GTA GTG GGG ACG GCG GAT CGG CCG TTG GAC GCC TCG gly wal led and and one cha har har har div the are see and became are are 241/81 271/91 GCC TTG CGG GAC TGG GCA CAC GCC GTC GTC AGC GAT C ala leu arg asp trp ala his ala val val ser asp

SEQ ID Nº 41A

FIGURE 41A

1/1 31/11 CTG GCC GGG ACG CCT ACG TGT AGC CCG CGC CTA GCA CAG GAT AGC CAT TGT TGT GCG GTA les als gly the pro the cys see pro arg les ala glo asp see his cys cys ala val 61/21 91/31 GCO CCA AAA CGA TCA GCC CTT CGC GGA CAT STC AGC ACC CGC CTT GGC CGG GAG AGC GGC ala pro lys ard ser als les arg gly his val ser the arg les gly arg gls ser gly 151/91 STC STG ACC GTG CTG TCA CCA CST CTG STT AGG CTC GGG GCG CGG GCT GGC GCG GAG GAG val val thr val leu ser pro arg leu val arg leu gly ala arg ala gly ala glu glu 191/61 211/71 GTG TGT TGC GGA GGA GGT GTS TTG TAG TGG GGA CGG CGG ATC GGC CGT TGG ACG CCT CGG val cys cys gly gly gly val les AMB trp gly arg arg lie gly arg trp the pro arg 241/81 271/91 CCT TGC GGG ACT GGG CAC ACG CCG TCG TCA GCG ATC pro cya gly the gly his the pro ser see als ile

SEQ ID N° 418

FIGURE 41B

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1/1 31/11 TOS CCO GGA CGC CTA CGT GTA GCC CGC GGC TAG CAC AGG ATA GCC ATT GTT GTG CGG TAG trp pro gly arg lew arg val als arg gly AMB his arg ile als ile val val arg AMB 91/31 CUC CAA AAC GAT CAG CCC TTC GCG GAC ATG TCA GCA CCC GCC TTG GCC GGG AGA GCC GCG ard gin asn asp gin pro phe als asp mot ser ala pro ala leu ala gly arg ala ala 121/41 151/51 TOS TGA COS TGC TGT CAC CAS STO TGG TTA GGC TOG GGG CGC GGG CTG GCG CGG AGG AGG ser OPA pro cys cys his his wal trp les gly ser gly and gly les als and and and 211/71 TOT OTT GCG GAG GAG GTG TGT TGT AGT GGG GAC GGC GGA TCG GCC GTT GGA CGC CTC GGC cys val ala glu glu val cys cys ser gly asp gly gly ser ala val gly arg les gly 241/81 271/91 CIT SCG GGA CTG GGC ACA CGC CGT CGT CAG CGA TC leu ala gly leu gly thr arg arg arg gln arg

SEQ ID Nº 41C

FIGURE 410

Séquence codante Rv2975c prédite par Cole et al, 1998 (Nature 393: 537-344) et contenant seg41A

31/11 gig agg acy gog gat ogg ood tig gad god tog god tig ogg gad igg goa cad god gid val gly the als asp and pro led asp als see als led and asp trp als his als val 61/21 91/31 gto ago gas otg ato oto can ato gan gag ato aan ogg oto aat grg tto ong gto ger val ser asp led ite led his ite asp gld ite ash arg led ash val phe pro vai als 151/51 gas too gat all ggs gts aas atg stg tts ace atg ogt ges geg gts gta gaa get gat asp sor asp thr gly val aso met let phe thr met arg ala ale val val glu ale asp 211/71 tig car gog sat tog cag get gan god gan gan gig gog ogg git gog got oth gog lou his ala con ser gin ala sep ala giu asp val ala arg val ala ala ala leu ala 241/81 ged agd gog ogt tga ala gly ala ang OPA

SEQ ID N° 41D

FIGURE 41D

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132/185

ORF d'après Cole et al. 1998 (Nature 393: 537-544) et contenant Ry2975c

1/1 31/11 tag got ogg ggc gog ggc tgg oge gga gga ggt gtg ttg ogg agg agg tgt gtt gta gtg AMB ala arg gly ala gly trp arg gly gly gly val leu arg arg arg cys val val vel 91/31 gag acg gog gat ogg oog tig gat god tog get tig ogg gat tig goa can god gin git gly thr als sap arg pro leu asp als ser als leu arg asp trp als his als vel val 121/41 151/51 ago gat ong ato one dae ato gae gag ato and egg one ant gry the eeg gio get gae ser asp leu ile leu his ile asp glu ile asn arg leu asn val phe pro val ala asp 211/71 tee gat acc gge gte ase atg otg tte acc atg egt gee geg gte gta gas get gat ttg ser asp thr gly val asn met leu phe thr met arg als als val val glu als asp leu 241/81 271/91 car gry sat tog cay get gad god gam gad gty gdy dyg gtt gog god get oto gog god his ala asn ser gin ala asp ala giu asp val sia arg val ala ala ala ieu ala ala 301/101 ggo gog ogt tga gly ala arg OPA

SEQ ID N° 41F

FIGURE 41F

séquence Rv 2974C prédite par Cole et al. (Nature 393:537-548) et pouvant être dans la même phase de lecture que Seq41D. Le séquençage de cette région fait apparaître dans un cas sur trois une délétion de deux nucléotides mettant en phase baervé dans

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1/1
                                        31/11
ttg aan gga get oge gge aan too ggo gtg ato otg too cag ato otg oge ggg ato goa
led ash gly als arg gly ash ser gly val the led ser gln the led arg gly the als
                                        91/31
gag gtg acc gog act gog god god god tot ggd gog gta tig ogg gog gio gad god asc
glu val the als the als als als act gly als val les arg als val asp als asn
121/41
                                        181/81
goo oto gag goo god tig iga ogo gas gid gag iig gio gio gog iog atg gat ggo gig
als les gly als als les trp arg gly val gls les val val als ser met gly gly val
                                        211/71
gag gtg ocg gga act atc gtc tog gtg otg ogg god god god gga god gtd gad bag tgd
glu val pro gly the ile val ser val leu arg ala ala ala gly ala val asp gla cya
241/81
                                        271/91
gry car gag gag the eor get gre ght are er got get gat gat gog gre att geg etg
ala his glu gly leu ala gly sla val thr ala ala gly asp sla ala val ile ala leu
                                        331/111
dww word acc coc das card our dwc drd one dec dat ded dde ded dat det dec dde dde
glo lys the pro glu gin led asp val led als asp ala gly ale val asp ala gly gly
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133/185

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381/121
                                       391/131
ogg gge etg etg gtt etg etg gad gog tig ege tod aco ato ige ggg cag gea cet god
arg gly lew lew val law law asp als law arg ser the ile cys gly gin als pro als
421/141
                                       451/151
egg geg gee tac gas one tog ong oge geg teg ong and gat ang get are cas oge one
arg ala val tyr glu pro ser pro arg ala leu pro thr asp thr ala thr gin arg pro
481/161
                                        511/171
ged dog dam the gag gog mog that eng tog gog god got get get gem gog gog god dad dag
ala pro gin phe glu val met tyr leu leu ala val cys asp als ala ala ala asp gln
541/101
                                        571/191
ting ogg gat ogs the sag gas the egt gag top gin got att got got got one can gat
lou arg asp arg leu lys glu leu gly glu ser val ala ile ala ala ala pro pro asp
                                        631/211
age two too gta car gto car are gar gar got ggt god god gtg gaa god gga ttg gog
ser tyr ser val his val his the asp asp ala gly ala ala val glu ala gly leu ala
661/221
                                       691/231
gtg ggg cga git ago ogg ato gig ato tog gog oto ggt too ggg ace ago gga tog eeg
val gly arg val ser arg ile val ile ser als lou gly ser gly thr ser gly lou pro
                                       751/231
ala gly gly trp thr arg gly arg ala val led ala val val asp gly asp gly ala ala
781/261
                                       811/271
gag ong the god gag gag gge god igo gig ong ega dog got oca gad god gig aca dog
glu leu phe ala gly glu gly ala cys val leu arg pro gly pro asp ala val the pro
841/261
                                        871/291
gan gan gat ato agt que can cag oty gry ogy gen gry gta gan ann ggn gon gog nan
ala ala asp ile ser ala his gin led val arg ala val vol asp thr gly ala ala his
901/301
                                       931/311
gig aig gig cig coc aat ggo tat gig goo goo gaa gaa oog gog goo ggg tgt acc gog
val met val les pro son gly tyr val ala ala glu glu les val ala gly sys thr ala
961/321
gog ate age tag age ate due tid dra eer ate eed eed eed eer de ted eta ate dra cod and dad erd
ald the gly trp gly val asp val val pro val pro the gly see met val gin gly lew
                                        1051/351
ged geg etg ged gig dat gad geg ged egd dat gid gid gid gid gid gid sig agd atg ged
ala ala leu ala val his asp ala ala arg gln ala val asp asp gly tys ser met ala
1081/361
                                        1111/371
out goo goo got got too ogg cae ggs tog gty ogo att goo soo caa aag gog etg ace
arg ala ala gly ala ser arg his gly ser val arg ile ale the glo lys ala lew the
                                        1171/391
tag goo got eer tor hay ong goe gar got oty got are gog gor gar gag gro etg ato
trp ala gly thr cys lys pro gly asp gly led gly ile ala gly asp glo val led ile
1201/401
                                        1231/411
gto god gad gat gto god god god god ato ggt otg gto gad otg tig tig god tog gga
val ala asp asp val ala ala ala ala ile gly lou val asp leu leu leu ala aer gly
                                        1291/431
gae gat etg gig acg gig eta att ggo gen gge gia ace gas gae gig get gio gio etg
gly asp lew val thr val lew lie gly ala gly val the glu asp val ala val val lew
1321/441
                                        1351/451
gaa ogg cat gig cac gac cac cat coa ggo aco gag etg git too tac oge aco gga cac
glu arg his val his asp his his pro gly the glu law val ser tyr arg the gly his
                                        1411/471
ogo 930 gas gog otg otg ato 939 gto 9ag tag
arg gly asp sis lew iew ile gly val gim AMS
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SEO ID N° 41S (suite)

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Seq41T compressnt seq 41F of seq 41S

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33/33
tta que teq qua ege que eta qea ema ana ana ent que que qas que egt tot ant
leu gly ser gly arg gly leu ala arg arg arg rys val ala glu glu val cyr cys ser
 AMES ala and Giy ala Giy top and Giy Giy Giy Val led and and and cya val val val
  ang len giy ala ang ala giy ala gin gin val nya nya giy giy giy val len AMB enp
61/21
                                        91/31
ggg gac ggc gga tog goo git gga ogg ett ggc ett geg gga eig ggc aca oge egt egt
gly asp gly gly ser als val gly and law gly lew als gly law gly the and and and
 gly thr ale eap arg pro low asp ale ser ale low arg asp trp ale his ale val vel
  gly arg arg ile gly arg trp the pro arg pro cys gly the gly his the pro see see
121741
                                        181/81
cag ega tot gat eet oca cat ega ega gat caa eeg get caa tot gtt ees got ega toa
gin and sen ash but but yet yet and ash din but als din the har but and the
 ser asp les ile les his ile asp glu ile asn arg les asn val phe pro val ala asp
  als the OFA sor sor threer throng ser the gly ser mor cys ser and ser leu thr
101/61
                                        211/71
che ega has egg ogt caa cat got git cae eat gog toe egs got egh aga age toa tit
leu arg tyr arg arg glo his als val his his als cys arg gly arg arg ser OPA phe
 ser asp thr gly val asm met led phe thr met arg als als val val glu als asp led
  pro ile pro ela ser thr cya cya ser pro cya val pro arg ser AMB iya lau ile cya
241/81
                                        271/91
ges ege gaa tre ges gge tys ege ege egt gge get get tge gge ege tet ege gge
ala and glu phe ala gly OPA and and and and dly ala gly dys gly and sen and gly
bis als and ser gin als app ala glu asp val ala arg val ala ala ala isu ala ala
  thr ard ile ard and led thr pro lys thr trp and dly led and pro led ser and pro
301/101
                                        331/111
edd edn ded tid gas dag det ede das gas for das did att eid iet egd git ett ede
arg arg ala leu asn gly ala arg gly asn ser gly val ils leu ser gln ile leu arg
gly als ard OPA the glo less als als the pro als opa see dys pro arg see dys als
  ala and hat din and sen sen and die yan and and sed bee had bee sab bee ala and
361/121
                                        391/131
gay ato you gay gig see gog act gog goe got you for you goy gia tiy ogg gog gio
gly ile ala glu val thr ale thr ale ale ale ale ser gly ale val leu arg ale val
gly ser gin arg OPA pro arg leu arg pro pro pro leu ala arg tyr cys gly arg ser
  amp and and div amp and cash che div and and less one and div its all div div and
421/141
                                        451/151
gas goo aac goo oto ggg goo gog tig igg ogo ggo gio gag itg gio gto goo gog tog atg
asp ala asn ala leu gly ala ala leu exp arg gly val glu leu val val ala ser met
the pro the pro see gly pro and cys gly ala als see see top see see and and trp
  and dru and bue and dry and was as and and and and one of and and and the cap dry
481/161
                                        513/171
ggt ggc gtg gag gtg cog ggs act sto gto tog gtg ctg egg gto goe gee gga goe gte
gly gly val glu val pro gly the ile val ser val lou and ale ale ale gly ale val
 val als trp ard cha ard din jen ser ser ord cha che din bro bro din bro ser
  trp and div div als div son tyr and low div als als div and and sen and and
641/181
                                        571/191
dan cad the ded eac day dod sed den dat ded dec acc dec dec dec dat dan ded ded dec
asp gln cys ale hia glu gly leu ala gly ala val the ala ala gly asp ala ala val
the ser als any the any gly trp pro val and ser pro pro pro val the any any ser
 pro wal arg ala arg gly wat gly arg cys gly bis arg arg arg OPA arg gly gly bis
601/201
                                        631/211
ate god end das sad see eed das cad ett dae did ett dee dae ded dde ded did dae
ils als leu glu lys the pro glu gin leu sap val leu ala sep als gly als val sep
ser any top lys and pro pro asm ser les the dys ser pro man and all and top the
 ard ala gly lys asp pro and the ala SPA and ala and one che dly and dly dly and
661/221
                                        691/231
gan dan ada ada dan ard are dre are are are dou the ada ton son son see the Add and
als gly gly arg gly led led val led led asp als led arg ser the ile cys gly gin
 pro als asp gly als cys trp phe cys trp the arg cys als pro pro ser als gly arg
  and and the dly pro sia gly ser als gly and values her his his lew and als gly
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135/185

733/251 goa our god ogg gog git iad gaa out tog eng ogt gog tig ong ant gad ang got acc als pro als ary als val typ glu pro ser pro arg als law pro the asp the als the his led pro-gly and sen the aso pro-and and als and dys and pro-the and led prothe cys pro gly gly len are the lan als als are valuate sap are his gly tyr pro 781/261 \$13/271 caa ogo ooc goo oog caa tto gag gtg atg tat org ttg gog gta tgt gat got goa gog gin and pro als pro din phe glu val mat tyr led led als val cya sap als als als ash als pro pro arg ash ser arg OPA cys ile cys trp arg tyr val met leu gin arg the pro and pro als ile and div sap was set was div div met OPA dys der div 841/281 871/291 god dae ead tid edd dat ega ete aad gaa tid ddi gag ted did dee ate gos get get ala asp gin leu arg asp arg leu lys glu leu gly glu ser val ala ile ala ala ala arg the see eys gly ile sap see ang ash tro val see arg tro pro see pro les less gly pro val als gly ser the glm gly ile gly OPA val gly gly his arg arg cys ser 901/301 933/331 and one day age fac the dra can dre can ack day day don dde don den dra day den pro pro asp ser tyr ser val his val his the sep asp als gly als als vel glu als arg pro the ala the pro tyr the sac the pro the the pro 481 pro pro tip lys pro ale and din len len and the and becomes and and and end the and did see and 961/321 991/331 gga tig gog gig ggg mga git ago ogg ato gig ato tog gog oto ggt top ggg aco ago gly leu als vel gly arg val ser arg the val the ser als leu gly ser gly thr ser asp top and top dly dlu led als dly ser OPA set and and ser val pro dly pro als ile gly gly gly ala ser AMB pro asp arg asp lew gly ala arg phe arg asp glm arg 1021/341 1051/351 edy trd ead dae dar ada red edd dae eda dae dre erd ded dre dre dre dre dae ede ees gly lev pro ala gly gly trp thr ary gly arg ala val law ala val val gap gly asp asp cys arg pro val ala gly arg gly ala ala pro cys trp arg ser ser the ala thr ile als div and and see see als div bus and are all div div and and and and 1081/361 1111/371 ggt god gad gag eng the god gag gag ggd ged top gng eng ega cog ggt bea gad god gly ala ala glu leu phe ala gly glu gly ale cya val leu arg pro gly pro asp ala val pro pro ser tys ser pro gly arg ala pro ala tys tys asp arg val gin the pro cys and and sie well and and div div and law and sie old the div ser and and and 1141/391 1171/300 gid aca one got got gat ate agt got can bad etg gtg ogg got gtg gta gat ace ggt val the pro six als sop lie see als his gin lew val arg als val val map the gly OPA his arg pro pro ile ser val pro the ser trp cya gly pro trp AMB the pro ala amp the gly and and the dia che pro bec mis did mis did and did and bed 3201/401 1231/411 gue gog car gtg ang gtg ong nor ast ggo nat gra gon gon gas gas ong gtg gon ggg ala ala his val met val leu pro sen gly tyr val ala ala glu glu leu vol ala gly pro and the COA top cys cys pro met ala met top pro pro lys am top top pro gly ary ala ary asp gly ala ala gin trp leu cya gly arg arg arg thr gly gly arg val 1261/421 1291/431 tht acc gog gog ato age tay age ato had ath are occ htp our acc his tog ath ath cys the ala als lie gly try gly val asp val val pro val pro the gly ser met val har bac and and ser are did are not the the but the and but web and the the tyr and give sopering less gly and and and gly the ong ale aspect iterasp gly ala 1021/441 1351/451 cay gyg thy you gog ong you ghy can yac you you ope can got you gre yac gae gge hat gin gly let als als let ale val his cap ale ale arg gin ale val cap cap gly ryr ary gly trp pro ary trp pro eye met the ary pro als ary pro sec the the als the gly wal gly are ala gly are ala OFA are gly pro pro gly are are are are less glo 1383/461 1411/671 ago and doe out see goo got got not egg car gos nog gog egg ant doe ace cas and ser met als arg als ale gly els ser arg his gly ser val arg ile als thr gln lys ala trp pro val pro pro val lau pro gly thr asp and cys als lau pro pro lys and his gly pro cys and and cys phe pro als and the gly als his cys his pro lys gly

SEQ ID N° 41T (suite 1)

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1441/481 1471/491 quy nig acn igg got got ace ige aag oog gge gae ggt cig ggt ato gog gge gae gag ala law the trp ala gly the eya lya pro gly asp gly lew gly ile ala gly asp glu ard OPA pro dly pro val pro ala ser ard ala the val tep val see ard ala the ard ala asp lew gly arg tyr lew glm ala gly arg arg ser gly tyr arg gly arg gly 1501/501 1831/811 gtg erg ate gte gee gae gat gte gee geg geg gee ate ggt etg gte gae etg ttg ttg val led ile val ala sap aap val als ala ala ala ile gly led val app led led led cys OFA ser ser pro the met ser pro and and pro ser wal top ser the cys day top ala asp and and and the the sed and the this and the the the the column of the sed and the column of the sed and the column of the sed and the column of the 1861/821 1591/531 gea teg ggs que qui etq gtq acq gtg eta att gge qee gge gta acc gaa gue gtg get als ser gly gly asp leu vol thr val len ile gly ala gly val thr glu asp val ala his arg glu als ile trp OFA arg cys OCH leu als pro als OCH pro lys the trp leu ile gly and and ser gly asp gly als aso try and and and and and and gly cys 1621/941 1631/861 are are end day edd san did eac day can can be add acc dad end die toe sac ede val val led glu and his val his asp his his pro-gly thr glu led val ser tyr and ser ser trp asn gly met dys thr thr ile glm ala pro ser trp ser pro thr ala and but did the six can ela and but but see and his and als did for len but his 1691/561 1711/571 ace dda cae ode dde dae ded etd etd ate ddd dte dad tad the gly his arg gly asp als led led ile gly val gld AMA pro asp the ale als the arg dys OFA ser gly ser ser and the becomed and and als app and div and Asi

SEQ ID N° 41T (suite 2)

FIGURE 417 (suite 2)

1/1		•							31/11								
GCC GGT	AAC	©CC	GCG	TOO	CAG	TGC	TAT	CCG	TCC SEC	GGA.	CCG	000	AAD	ACA	TEA	GÇQ	GCG
ala gly	8.50	ala	ala	342	gla	сув	tyr	pro	ser ala	giy	pro	pro	glu	the	202	ala	ala
61/21									91/31								
GGC GCC	CCG	GTC	GGC	೦೦೦	660	CGG	CCT	CGA	ccc scr	CCA	CCT	GGC	CAT	$\mathbb{C}\mathbb{A}\mathbb{C}$	CEA	CCA	oor
giy ala	920	val	gly	ğığ	aya	arzā	ala	arg	pro ala	ozq	pro	gly	bis	gla	arg	000	glv
121/41									151/51								-
TAT CGA	cor	GGA	AGO	SGA	CGG	TOT	TGG	gat	GCA CGC	CCA	ACT	Tec	caa	CGA	rcs	caa	CGA
tht stå	gây	gly	ser	gly	arg	cys	pab	asp	ala arg	pro	thr	cys	arg	3.53	882	arg	8.23
181/61									211/71							•	•
TOC TCA	zos	GAA	cee	GCG	ACG	CAC	ACA	$\mathbb{A}\mathbb{T}\mathbb{G}$	CCC GCA	GCA	000	CAC	CAC	QQC.	occ.	CCA	cca
CA2 202	Ser	glu	$\mathfrak{D}\mathfrak{X}\mathfrak{S}$	818	thr	ain	thr	dem.	pro ala	313	pro	ដែនន	asp	gly	ala	oro	pro
241/81									271/91							-	-
oci cii	AD 3	GLB	ROC	TOR	3.0 %	E > 2	CAC	TCA	CCC CCA	J.A.T.	SSC	700	200	act	606	cer	GAG
ala les	ala	$\Delta S_{\rm F}^{\rm T}$	thr	OPA	088	OPA	nis	365	pro pro	OCH	919	3 82 X	881	#1.8	ala	or co	ala
301/101									331/111							-	
CAA TGC	AGT	AAG	$T_{ij}T_{ij}T_{ij}$	ACA	AAC	ACG	GAC	TTG	TAA AAA	CCT	QQQ	QAG	GTG	999	TCT	Are	sac
gin cys	882	lys	phe	thr.	gin	thr	883	188	OCH lys	220	8.1.8	wia.	જસ્ક દે	@1.v	882	28.82	als
J61/121							,		391/131	-				S X			55.55.55
AAC AAA	CGT	GGC	AAT	$\mathbb{Q}\mathbb{Q}\mathbb{Q}$	999	CAG	CCT	CFG	ccc ms	TCG	GAT	Ω					
asn lys	2.53	gly	883	8,1,8	gly	938	pro	leu	pro leu	38 X	889						

SEQ ID N° 42A

FIGURE 42A FEUILLE DE REMPLACEMENT (REGLE 26)